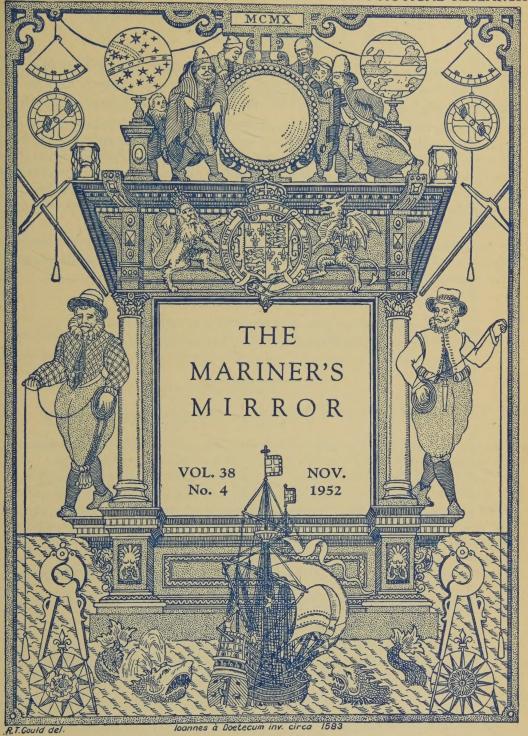
THE QUARTERLY JOURNAL of the SOCIETY FOR NAUTICAL RESEARCH



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To encourage research into nautical antiquities, into matters relating to seafaring and shipbuilding in all ages and among all nations, into the language and customs of the sea, and into other subjects of nautical interest.

The Society has erected a Monument to the Van de Veldes in St James's, Piccadilly, London; raised £107,000 to save Nelson's Flagship and has superintended the restoration of H.M.S. VICTORY to her appearance as at the Battle of Trafalgar; paved the way to the establishment of the National Maritime Museum at Greenwich and the Victory Museum at Portsmouth; organized exhibitions of Nelson relics and naval prints, etc.; and issued several periodical publications dealing with nautical archaeology, besides an inexpensive set of official plans (ten in number) for building a model of H.M.S. Victory.

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CONTRIBUTIONS TO THE MARINER'S MIRROR

The aim of the Society being to arrive at true conclusions through free discussion, it is distinctly to be understood that the Editor is not held responsible for statements made in the *Journal*.

Contributions and correspondence should be addressed to Commander Hilary P. Mead, R.N., 4 Eliot Place, London, S.E. 3. Although not absolutely essential, it would be of great assistance to the Editor and the Printers if articles, notes, queries, answers and reviews of books could be typed, on one side of the paper, preferably quarto, with double-spacing and with a wide margin. Photographs and line drawings to illustrate contributions are welcomed, but on account of the cost and a shortage of 'art' paper the use of plates has to be somewhat restricted.

Names of ships should be underlined to denote italics, and not written within inverted commas.

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ANNUAL GENERAL MEETING OF THE SOCIETY FOR NAUTICAL RESEARCH

HE Annual General Meeting of the Society for 1952 was held in the Lecture Room of the National Maritime Museum on Wednesday, 25 June 1952. The President of the Society was in the Chair, and among those present were the following:

Mrs R. C. Anderson, Miss M. G. Atkins, Mr W. J. Bassett-Lowke, Mr W. T. Reginald Beckett, Mr R. A. Bird, Captain H. T. A. Bosanquet, Mr Edward Bowness, Professor J. G. Bullocke, Mr T. Cairns, Miss E. G. R. Callender, Mr F. G. G. Carr, Mr H. G. Carr, Mr Duncan Carse, Miss J. M. Flavel Carter, Captain W. R. Chaplin, Lieut.-Commander J. H. Craine, Mr and Mrs R. H. Dolley, Mr Albert Ehrman, Mr William C. Fox, Mr and Mrs E. H. Hinbest, Brigadier H. A. Joly de Lotbinière, Mr Philip Kershaw, Mr Douglas King-Page, Mr Basil Lavis, Professor Michael Lewis, Miss K. Lindsay-MacDougall, Mr C. C. Lloyd, Mr R. Lowen, Mr Frank B. Maggs, Mr John Maggs, Commander W. E. May, Commander and Mrs H. P. Mead, Commander R. D. Merriman, Sir Alan Moore, Mr John Munday, Mr G. P. B. Naish, Miss Ella F. Oswald, Mr R. H. Penton, Commander C. G. Pitcairn-Jones, The Rev. and Mrs J. R. Powell, Mr Laurence A. Pritchard, Mr Gregory Robinson, Mr Michael Robinson, Mr A. Smith, Admiral Sir Aubrey Smith, Mrs M. Stuart, Mr G. R. Sweetland, Mr D. C. Thomson, Captain Geoffrey Thorne, Rear-Admiral H. G. Thursfield, Mr A. L. Tucker, Commander Harry Vandervell, Mr A. H. Waite, Mr A. E. Weightman, Mr Arthur Welford, Mr and Mrs G. R. G. Worcester, and Mr M. F. Wren.

Mr R. C. Anderson, in opening the proceedings, said:

'Those of you who have attended a good many of these Annual Meetings may have noticed that, although the agenda states Mr Anderson will take the Chair, it does not state "and will deliver an address". That does not mean that I am going to let you off entirely, but only that what little I have to say

is hardly worthy of being called an address.

I must start off with three apologies. First, I apologize for having to alter the date of the Meeting. We all know the letters "E. & O.E." on a tradesman's account. Well, in this case the errors and omissions were not excepted but committed, if one can commit an omission. We fixed the Meeting for a day on which we found that a good many of the Museum staff, to whom we owe so much, would not have been able to be here. We did not discover this until the notices had already been circulated, so the simplest way out of the difficulty was to change the date of the Meeting.

In the January *Mariner's Mirror* members were asked to express an opinion as to whether there was an advantage in holding the Meeting on Saturday instead of Wednesday; but we got so little response to our request for statement of preference, that we decided to stick to Wednesdays.

There are two more personal apologies. First, I would like to apologize

for being away at last year's General Meeting; and I have to apologize for disappearing so very quickly after Commander May's lecture some time ago. In the first case, long before Sir George Hope decided he could not carry on, I had arranged to leave England for Sweden towards the end of June, and when the Meeting actually took place my wife and I were somewhere on the east coast of Sweden, with violent thunderstorms going on. The second apology; for going away so quickly after the lecture was simply a question of laziness. By going away, I got driven home. It isn't far to walk, but it is all uphill and old age is creeping on.

At one time the President could be quite certain that he could finish up his address with some sort of startling announcement such as the acquisition of the Mercury models or the Macpherson collection of prints and pictures, or even the establishment of the National Maritime Museum. I am sorry there is nothing startling of that kind to-day. There are, however, a few events in the last six months that the Report does not cover. Unfortunately these interim statements have nearly always to include deaths. This time we have to mourn the loss of two well-known members. First, Admiral Sir Henry Kitson, one of our Vice-Presidents. He was an active member of the Council since 1935, and had written several articles for The Mariner's Mirror about Portsmouth Dockyard, where he had been Admiral Superintendent. Secondly, Mr Lionel Foster, who was a very early member of the Society, and who had been on the Council at intervals from 1924 onwards. He was a member of our Publications Committee, and he gave a number of very interesting exhibits to this Museum. We shall miss them both very much.

If you have read the Report, you will know that for a long time we have been hoping to be able to use part of the "Save the Victory" Fund to extend the Victory Museum, and to pay the salary of a full-time Curator. We took this matter up with the Commander-in-Chief towards the end of last year, and he received our suggestions so well that I am glad to be able to tell you that the appointment of a Curator is an accomplished fact. Instructor-Captain T. E. Jackson, Royal Navy, the late Education Officer of the Portsmouth Command, started his duties on I May, and I am sure he is

going to prove just the man for the job.

As for enlarging the Museum, we have the official blessing for the scheme, but it has to wait until labour and materials can be spared from more urgent

Another of our Funds has been well employed, at least I trust you will think so. We gave £300 from the Macpherson Fund towards the purchase of the large painting by Van de Velde of the Battle of the Texel, which I was going to say is hanging in the Hall of the Queen's House. Unfortunately it is not, as the ceiling in the Queen's House is showing signs of giving way, and it has been necessary to remove the exhibits and close that part of the building. This contribution was, I believe, the largest single sum that the Macpherson Fund has ever made, but fortunately the money was fairly plentiful at the time, and it went to a very worthy object.

Altogether, our Society continues to flourish. Our Annual Lecture was as well attended as ever, and as interesting as ever. Those of you who were not present will be able to read all about it in the next issue of the Journal,

"The History of the Magnetic Compass".

A good many members of our Society have been busy in the literary line. I do not know how their output compares with that of other years, but it is certainly quite impressive. We have had books on comparatively modern craft, large and small, from Mr Chapelle, Mr Greenhill, Mr MacGregor and Mr Underhill. Admiral Thursfield has given us a series of naval journals of roughly Napoleonic dates; while Professor Morison, one of our American members, continues to produce volumes of his great history of American naval operations in the late war. I wish we could talk about our own history in the same way. I nearly forgot my own contribution, the catalogue of the models in this Museum. I think I can urge you all to go down and buy that, because I do not get anything out of it. There was a lot of hard work put into it, and I should like to see it selling off.

The membership goes on quietly. We have had 38 new members this year. We have managed to pay our way on the old subscription of 21s. Probably the membership of this Society is the only thing that doesn't cost you anything more than it did a few years ago. It is true that *The Mariner's Murror* is smaller than it was before the war; but there is no reason why it should not gradually get back to its former size. All you have to do is to get more members for the Society. I can assure you the editor will be glad to make good use of the extra money available. To emphasize this, let me finish with an improvement on something I said here a few years ago: "More members, more money, Mead much merrier makes *Mariner's*

Mirror more magnificently many-sided."

Formal proceedings of the meeting then followed.

THE CHAIRMAN: 'The Minutes of the last Annual General Meeting were published in *The Mariner's Mirror* for October last year. I take it that you do not want them to be read here. Is that agreed?

BUSINESS TO BE TRANSACTED

(1) To consider and, if thought desirable, to adopt the Annual Report and Statement of Accounts of the Society and of the "Save the Victory" and Macpherson Collection Endowment funds for 1951:

MR LOWEN:

'I do not think it necessary for me to dilate on a mass of figures which are available for inspection in the Annual Report; but I will endeavour to give a brief outline of the financial position of the Society by pointing out a few facts which are obvious to those who do look at the balance sheets, but are not so well known to those who do not like the look of figures.

It gives me much pleasure to be able to report that there was an excess of income over expenditure in 1951. This favourable balance was achieved by your Hon. Editor's industry and the Treasurer's insistence that the size of the *Journal* and the number of illustrations should not be increased.

It is interesting to note that the total income of the Society for 1950 and 1951 varied by only £5, and that subscriptions in 1951 increased by £13, making a total of £1091. The cost of printing and publishing *The Mariner's Mirror* and Annual Report was £1265, and it will thus be seen that the annual subscriptions fall short by £314 of the sum required for printing alone. In addition, a further £150 is required annually for other activities of the Society throughout the year.

The additional sum required, you will observe from the accounts, is obtained from the sale of back numbers, off-prints, advertisements, interest on securities and refund of income tax from covenants; and as this income is liable to considerable fluctuation, the Treasurer feels justified in his parsimonious attitude towards the Hon. Editor, as printing and other

costs are still rising.

Your Council do wish to keep the subscription at the pre-war rate of one guinea, and it will be appreciated that every effort must be made to avoid realizing our securities, and to try and increase the number of covenants. With income tax at 9s. 6d. in the pound, the signing of a covenant form gives the Society an extra 19s. on every guinea subscription. In this manner it will be possible, as soon as costs become more stable, to increase the size of the Journal and the number of illustrations.

The two subsidiary accounts of the Society, the Macpherson Collection Endowment Fund and the "Save the Victory" Fund, are in a healthy condition. The National Maritime Museum continues to derive increasing benefit from the Macpherson Fund which is able to purchase items not easily obtained on the Museum "Vote"; and it is hoped that further

progress will be made with the "Victory" Museum when the supply situation eases. The details of these accounts are in the Report and it is not necessary for me to expound upon them.

I therefore have much pleasure in presenting these accounts to this

Meeting.

CHAIRMAN: 'Any questions about the Accounts before they are accepted?'

MR GREGORY ROBINSON: 'I have great pleasure in moving that the Report and Statement of Accounts of the Society and of the "Save the Victory" and Macpherson Collection Endowment funds for 1951 be adopted. I do congratulate the Hon. Treasurer on having reversed the horrible figure that we had last year.'

PROFESSOR BULLOCKE seconded the motion, which was carried.

(2) To elect the officers of the Society for the year:

MRG. R. WORCESTER: 'I have been asked to propose the election of the Officers for the ensuing year. They are too well known and too famous to need any comment from me. Mr Gregory Robinson is the only newcomer. He is well known as a marine artist who delights in painting seventeenth-century ships. There are two other names that I cannot resist

mentioning.

When I was sent to a Japanese camp, the Japs allowed us to take three books per person into camp. I took in with me Mr Anderson's Sailing Ships, Sir Alan Moore's Last Days of Mast and Sail, and the Bible. These three books provided the basis for my nautical research knowledge. During my time in camp, a very kind French neutral friend sent me tinned foods, etc. When the war came to an end, I asked him what I might do to give him as a memento of his kindness to me. He said, "I would like you to give me those two nautical research books of yours; by this time you must know them by heart." I am very sorry that I was so generous, because I now hear that they are quite difficult to get, as they are out of print.

It gives me great pleasure to propose the election of the Officers for the

ensuing year.'

MRDUNCAN CARSE seconded the motion which was carried by a show of hands.

(3) To elect four new members to the Council:

MRG. P. B. NAISH: 'First, I should like to thank the retiring members of the Council, Mr Robinson, Captain Dorling, Mr Carr and Mr Brooks, to whom the Society is very much indebted. I should also like to con-

gratulate Mr Gregory Robinson on his election as a Vice-President of the Society. You have in front of you the following nominations for the new members of the Council:

Professor C. R. Boxer, who of course is well known to you. He has written a lot, sometimes in *The Mariner's Mirror*, on Dutch naval history and maritime affairs in the Far East, and he is also on the Council of the Hakluyt Society. I am sure we will welcome him on our Council.

Admiral Hugh Taylor has also often written for *The Mariner's Mirror*, particularly a special article on the Battle of Trafalgar. He has recently prepared a lecture on this battle illustrated with a film strip, and he has

kindly presented copies to the Society and to the Museum.

Mr Worcester gave one of our Annual Lectures on Chinese junks. He

has published a comprehensive record of those craft.

Mr E. K. Timings is on the staff of the Public Record Office, and is particularly interested in naval records. He will be a great help to us, as he is always willing to help students.'

PROFESSOR BULLOCKE seconded the motion which was carried.

(4) To elect Hon. Auditors:

MR W. T. R. BECKETT: 'I have very great pleasure in proposing the re-election of the Hon. Auditors. There is even a check on the Treasurer; and I suppose they can suggest sometimes that if he is cutting down expenses too much, he could be a little more generous. In any case, I have the very greatest pleasure in asking you to re-elect Mr Arthur Smith and Captain Cooper, who have done their job so very well in the past.'

MR C. LLOYD seconded the motion which was carried.

(5) THE CHAIRMAN: 'The following alteration to Rule 22 will be proposed:

For "the Chairman and Secretary" read "the President, Chairman and Secretary".

PROFESSOR LEWIS: 'Mr President, Ladies and Gentlemen. The rules of any Society are of course sacrosanct; and, therefore, I feel I must very carefully explain the proposed alteration. It is not a very big alteration; it is really rather a routine one; but it may not be apparent to everybody how the situation has come about.

Our original President was Admiral the Marquess of Milford Haven, who you may remember was the father of our newly appointed Patron, the Earl Mountbatten of Burma. He was, of course, very much an original member; and, as President, he attended in person both the Council and the

Annual General Meetings. When he died he was succeeded by Admiral of the Fleet, Sir Doveton Sturdee. Sir Doveton Sturdee was equally keen, and equally served in the Chair on all those occasions. When he died, he was succeeded by Admiral of the Fleet, the Earl Beatty, who became our President. He found, however, that he was not able to attend ordinary Meetings and so forth, and it was arranged to appoint a Chairman of the Council who would ordinarily take the Chair at both the Council and the Annual General Meetings. It was then that Rule 22 came into force. It reads as follows:

The Council may appoint such Committees, with such deputed powers, as it may deem advisable. Of all such Committees the Chairman and the Secretary shall be ex-officio members.

So that during that regime when Lord Beatty was the President, and our Chairman who, from the first of course was Sir George Hope, that Rule held that the Chairman and the Hon. Secretary were the ex-officio members of those Committees; and that went on until Earl Beatty died in 1936. But even then that Rule did not have to be changed, because what the Society did in 1936 was to promote Sir George Hope to President while he retained the office of Chairman. That went on until last year, when to the regret of us all, Sir George Hope retired. Then the Society were wise enough to appoint Dr Anderson to be their President, and kind enough to appoint me to be their Chairman; so now this Rule does need revision. I have been asked to suggest that it should be put right in the words which you have on your papers, for "the Chairman and Secretary" read "the President, Chairman and Secretary". Let's be strictly logical about this; because the easiest thing would be to substitute the words "The President" for "The Chairman"; and, indeed, if anybody thinks fit to propose an amendment to this motion which I am now putting forward, I shall hastily get on my feet and second it.

I move that, in order to allow the President to be an ex-officio member of committees, for "the Chairman and Secretary" read "The President, Chairman and Secretary".

MRANDERSON: 'I hope no one will move an amendment, as I want the Chairman, so that I can turn a job on to him. Will somebody second the motion in its present form?'

MRM. F. WREN seconded the motion which was carried unanimously.

(6) Photographic Records Committee

MR MICHAEL S. ROBINSON: 'The work of the Committee has been rather hampered this year by Mr Greenhill's absence on service abroad, and

also by Commander Hill's unfortunate illness. Another hindrance has been the economies which have been forced on all Government Departments, and I think most of all on the National Maritime Museum. That means that we have not been able to copy such a large number of photographs as we have been doing in the past years; and as that is the chief source of increase to our collection, the work has been very much hampered. In spite of that, we have been able to do about 20,000 photographs, and that brings the total number to about 75,000 which is less than what we bargained for when we started the collection some years ago. It is now four years; but we hope that the work will now be able to go forward a bit better, because Basil Greenhill is home on a really long leave, Commander Hill is out of dock, and we have hopes that the economies will be relaxed somewhat.'

(7) The Foudroyant Committee

MR CARR: 'I do not know, Mr President, that there is very much that I can appropriately do at the moment except to say that undoubtedly the financial situation is causing very considerable anxiety, because so far from advancing towards our goal of £60,000, as an endowment and for the restoration of the ship, our immediate expenses very much outrun the income. What the Foudroyant Committee will have to consider very seriously is whether it is possible to try to run the ship as she has been run in the past; and, if it is not, what alternative arrangements can be come to to preserve her. That I think is one of the most important considerations. She is after all something which has been entrusted to our care. She is the last frigate of the old sailing navy. She is intrinsically sound. I cannot emphasize that too strongly. She has been examined very thoroughly indeed by an expert. The repair of her quarter galleries has been completed, and apart from those few defects which have been reported, the whole framework is in extremely good condition. An unfortunate thing is that we have not succeeded in our drive to fill the ship during the school terms. I think we can, and our hopes that schools would come to the Foudroyant as they do to holiday camps complete with their masters so that they spend half the day on their schooling, and half the day on seamanship training, messing about with boats and so on, have not yet been fulfilled. It is too early to say yet what decision must be reached. There is, however, also the question as to whether it might be possible to join forces, the Foudroyant Committee with some other establishment concerned with sea welfare, with the training of young people, and fitting young people out for sea and so on, and which may not have a ship of its own; some way in which the ship can be used to greater capacity than she is being used at the present time. I can assure you that very grave conideration is being given to these serious problems; but I do not think that I can go further at the present moment, except to sound a warning that the ship is again running into difficulties and that all hands are doing their utmost to take whatever action may be necessary to save her, and that we may have to have a call yet "All hands to the pumps"; to pump a little financial aid again into the ship's resources."

There being no other business, the Meeting adjourned for tea in the

marquee on the lawn.



THE HISTORY OF MARITIME LAW

By William Senior

ARITIME law is the outcome of commercial intercourse by sea. When we consider the number of nations who throughout the ages have thus carried on trade, it is obvious that only the barest outline of its history is here possible. All that can be attempted in a single article is to sketch the general character of Maritime Law and to give a rough idea of its development in England since the Middle Ages.

Owing to its origin, maritime law had certain peculiarities which distinguished it from ordinary national law. If, for instance, we examine the tenures by which land is held in different countries, or the modes by which such property is transferred among different nations, we see at once how great an influence local customs and national characteristics have had in forming the laws regulating such matters. Each country has gone, so to speak, its own way. With maritime law it has been different. In the dealings and usages of a single class, merchants and mariners (albeit belonging to divers nationalities), there is little room for variety of institutions: and though the law merchant and the law maritime, formerly always considered as a single body of law, were a part of the internal law of every nation that used them, they were not national in the sense of being native.

Nowadays, when the consciousness of nationality is perhaps a little overdone, the willingness of men, born in different lands and owing different allegiances, to be bound by a common system of law may seem strange. It was not always so. Even up to the later Middle Ages the remembrance of the legal oneness of the Roman Empire still influenced men's minds, and her monumental jurisprudence (especially after its revived study in the twelfth century) was deemed a common law of nations. Moreover, the Canon Law, largely founded by the Church upon the model of the Corpus Juris, and claiming an equally universal incidence, was, until the Reformation, a working machine before the eyes of all Western Europe. There was therefore in those days nothing strange in laws that were not national: and as to laws that were national, that is to say, valid only within a certain territory, they could have but little application to commerce carried on by

I 'Even as the roundness of the Globe of the World is composed of the Earth and Waters, so the body of Lex Mercatoria is made and framed of the Merchants' Customs and the Sea Laws, which are involved together as the Seas and the Earth.' Malynes, Consuetudo et Lex Mercatoria (1686), Preface.

sea, a place which (except for the shadowy claims to dominion over parts of it presently to be mentioned) was nullius territorium. The Law Merchant (as an English chancellor of Edward IV's reign phrased it) was 'ley universal par tout le monde'. Even in the eighteenth century Lord Chief Justice Mansfield could declare, 'The maritime law is not the law of a particular country but the general law of nations.'

The medieval and later development of this body of law is evidenced by numerous maritime codes of various dates from the middle of the eleventh century to (let us say) Louis XIV's Ordonnance de la marine de mois d'août 1681. According to Sir Travers Twiss2 the Decisions of the 'Consuls of the Sea' of Trani on the Adriatic coast date from A.D. 1063: and in the Grágás, or laws of the ancient Icelandic commonwealth, the contents of which go back to the eleventh and twelfth centuries, there is a maritime element.3 Even at this epoch sea law was getting into writing at points as far apart as these. In the West the earliest of these codes was that known as the Rolls or Jugemens d'Oléron, a scanty compilation in its original form, which was adopted successively by the merchants of France, England and Spain. I shall have occasion to allude to it again, for it is frequently mentioned in English records as the code guiding, so far as it went, the decisions of English maritime courts. The so-called Jugemens de Damme and the Laws of Wisby were no more than later re-issues of the same rules for the use of the shipmen of the Low Countries and the Baltic. But the outstanding example of a body of maritime rules accepted by many different peoples is the Consolato del Mare, dating from near the end of the thirteenth century,4 which became the commercial code of the whole northern shore of the Mediterranean. It was a much more detailed and extensive code than those just mentioned, and indicates a more advanced civilization. It contains 294 sections or articles; in some editions two or three more. Of these the first forty or thereabouts deal with the procedure of the maritime courts of Valencia. In the subsequent capitoli the rights and duties of the shipbuilder, the owner and his partners, the captain, the crew, the cargo-owners and the passengers are formulated in detail. It has been said that it combined material taken from the customary maritime laws of Barcelona, Marseilles, Genoa, Pisa and Venice;5 it is certain that the nautical antiquaries of three several countries have patriotically claimed for their own land the glory of being its birth-place. It would seem, however, that the Libre del Consolat de Mar made its first appearance in the Catalan language, although it was at

¹ Year Books 13 Ed. IV (A.D. 1473).

² Black Book of the Admiralty, Vol. 11, Introduction, p. xliii.

³ Given with a French version by Pardessus, Collection de lois maritimes, Vol. III, pp. 55-67.

⁴ Professor Altamira in Cambridge Medieval History, Vol. vii, p. 598.

⁵ Park, The Law of Marine Insurance, Introduction, p. xxiii.

a later time so often printed in Italian that it is usually cited by its name in that form; and in comparatively recent times it has been relied on even by

English-speaking tribunals as an authority on mercantile custom.1

It is first to be noted that the rules embodied in these codes were gradually evolved out of customary usage. They were not of statutory origin. The law grew by degrees out of the decisions of the 'consuls' or 'prud'hommes de la mer' in the various seaports, declaring what in a disputed case the custom actually was. At Pisa, for instance, there were consules maris, who as early as 1233 had obtained recognition of their judicial powers from the Republic. These men were not lawyers, but experienced merchants, sometimes officials of the merchant-guilds. The point to be decided might be familiar and easy; but if they had to resolve some new question, if there was need to look into books, the 'Jures de la mer' would consult men versed in general law (usually, it is probable, doctors of the civil law) as experts, but without delegating to them the actual decision, which they themselves gave on general and equitable grounds.2 An equitable elasticity, as opposed to the rigid formalism of ordinary medieval legal procedure, was a feature in the administration of early maritime law. The contrast is expressly drawn in the record of an interesting Admiralty case tried in England in July 1361. If a few lines of contemporary law-French may be forgiven, the Court said (to the plaintiffs alleging that the foreign defendant was hedging) 'Et pur ceo qe ceste court qest office dadmiralle ne serra pas rullez si estroit come serront les autres courtz du roialme qe sont rullez par comune ley de la terre, mes est reullable par equite et ley marine.' I cite this early record merely for the enunciation of principle by the Court: for the facts I must refer the reader to the note below.3

The next characteristic of early maritime law to be noted is its summary procedure. The statutes of Italian seaports frequently direct that marine and mercantile causes shall be promptly judged: sometimes the time within which this ought to be done is expressly limited.⁴ Such causes are to be tried 'summarie et de plano sine strepitu et figure judicii'. The summary procedure appears also in English records. 'If a plea arise between a burgess and a merchant', say the customs of Newcastle-on-Tyne (temp. Henry II), 'it must finish before the third tide.' Similarly, the Custumal known as the Domesday of Ipswich declares 'the plees yoven to the law maryne, that is to wit, for straunge maryners passant and for him that abyden not but her

I It was, for instance, consulted by Sir W. Scott in the case of the *Aquila* (1798), I Ch. Robinson's Reports, p. 43; and cited by L.C.J. Tindal, in Gould v. Oliver (1837), 4 Bingham's Reports, N.C. 134.

Cauchy, Le droit maritime et international considéré dans ses origines (1862), Tom. 1, p. 305.

See The Camden Miscellany, Vol. xv, 1929, 'An Early Admiralty Case.'

⁴ Mitchell, Early History of the Law Merchant (1904), p. 12.

tyde, should be pleted from tide to tide'. It was to secure such despatch that the maritime court was often held upon some quay in the neighbourhood of possible suitors. In 1410 the English High Court of Admiralty, following this ancient precedent, was sitting, as is well known, at Horton's Quay in Southwark.

So much by way of preface as to the genesis and general character of maritime law. The earliest statement of it in any English document occurs in the so-called *Leis Williame*. These supposed laws of William the Conqueror were compiled by some unknown Norman early in the twelfth century in a gallant effort to reduce into writing the inchoate customary law of the land, already out of date in 1066 and of course made more so by the fact of the Conquest. He imported into his code a few fragments of Roman law which he thought might come in useful, and among them a reminiscence of the *lex Rhodia de jactu*, in a few lines dealing with the contribution to be made when goods are jettisoned from a ship in peril. There is much room for doubt whether in the then state of commerce in England any such provision was greatly needed. For a long time to come, until indeed the beginning of the sixteenth century, England was commercially a backward country. But the interpolation is interesting as a forecast. Maritime law was to be imported into England from abroad.

How soon the quay-side courts of English seaports (which dealt with local maritime matters before the Admiralties came into being in Edward III's day) began to function cannot be precisely stated. There is mention of a local maritime court at Newcastle-on-Tyne as early as the reign of Henry II;2 and the Domesday of Ipswich, mentioned above, shows that, in the reign of the first Edward, the bailiffs of Ipswich were administering the law merchant and the law maritime from tide to tide to the passing mariner. These seaport tribunals, if that be not too grand a name, were considered by Sir Travers Twiss to have been copied from their Mediterranean analogues, which are known to have existed there from the beginning of the twelfth century.3 I have already alluded to the Consuls of the Sea at Pisa. The 'Court of the Chain', which is frequently mentioned in the 'Assizes' of the Latin Kingdom of Jerusalem (a code dating from circa A.D. 1100), is another example of such foreign maritime tribunals.4 Intercourse with the Eastern Mediterranean and the Levant had been much stimulated by the Crusades. The very word 'admiral' has for ancestor an

I Black Book of the Admiralty, Vol. 11, p. 23.

² Stubbs, Select Charters, 9th ed. (1913), p. 133.

³ Black Book of the Admiralty, Vol. 11, p. ix.
4 The name has reference to the chain by which the entrance to a port could be closed.

Arabic word picked up in the East and imported into France and England. I The little Latin Kingdom of Jerusalem, where sea-law was already so far advanced as to have its own court, came to grief in 1187, and its fall was the cause of the Third Crusade. It is perhaps only a coincidence that it was upon his return from this region and from contact with the Pisan mariner, that Richard I (according to tradition) thought of the sea-rules of Oléron and ordained that they should have authority in England. His alleged 'enactment' of them is an afterthought born of a desire to endow a document with the prestige of a great name. There is little doubt that the Rolls of Oléron are the outcome of recorded judgements given by a tribunal of prud'hommes of the sea, interpreting the customs of the Atlantic sea-board; and that they were gradually evolved in the manner already described. Their authority lasted during a remarkably long period. In England it is probable that the seaport courts took them as the basis of maritime decisions even before the reign of the first Edward: and though this is uncertain, the following century provides a well-known record of a case (Pilk v. Venore) tried before the mayor and bailiffs of Bristol in 1351, in which the authority of the 'lex de Oléron' is assumed in the pleadings of both parties to the suit. In the year 1402 we find Parliament itself pointing to these laws as a guide for the courts of Admiralty, by that time established, and apt to trespass into fields not their own. In France it is ordained that the Admiral 'doibt administrer justice a tous marchans sur la mer selon les droits, jugemens, coustumes et usages d'Olléron'.2 Yet these same Rolls of Oléron, with several added articles, were being printed both in England and France, by no means merely as interesting objects of antiquity, in the middle of the sixteenth century: and Blackstone, in the eighteenth, spoke of them as 'still extant and of high authority'.3

Nevertheless, with the expansion of commerce, the old rules needed sometimes to be supplemented. The jurisprudence of ancient Rome (as arranged and codified by the Emperor Justinian's committee of jurists in the sixth century) had come to be regarded as a general body of doctrine suited to supply the legal *lacunae* in less scientific systems. The twelfth-century Bolognese writers of 'glosses' upon it were succeeded in the thirteenth by the Post-Glossators or Commentators, jurists who were bent upon adapting its 'divine reasonableness' to the needs of their own time. In legal science, as in commerce, Italy long led the way. Early in the

I As to the etymology of the word see N.E.D. s.v. Admiral. Spelman enlarges thereon in his tract 'of the Admiral Jurisdiction' in Part II of his Collected Works at p. 217.

² Rights and Pre-eminences of the Admiral of France. Printed in Black Book, R.S., Vol. 1, 0. 448.

³ For a résumé of the contents of the Rolls of Oléron, see Holdsworth, History of English Law, Vol. v, p. 121 et seq.

thirteenth century the Italian merchant came to England to carry on his trade. Many of his business ideas, the commercial company for example, were founded upon the principles of Roman Law. It has been said that 'without him and his commerce, the economic history of this island would have been utterly different and its growth in wealth and civilization would have been immensely retarded'. The infiltration of principles drawn from the storehouse of the Civil Law was inevitable: and in spite of what Pardessus calls the antipathy of the English to Roman Law (it would be more exact to say the ancient dislike of the English lawyer to acknowledge his borrowings) many useful rules adopted from the Digest and the Code found their way into mercantile practice. And the seventeenth-century legal antiquary Selden, stating the sources upon which the Court of Admiralty drew in his time, says: 'what occurs under the Titles "Ad legem Rhodiam de Jactu", "de nautico foenore", "de usuris nauticis", "de exercitoria actione" and other matters belonging to Marine Affairs are usually handled according to the Justinian Law and expressly taken from the Code of that Emperor and from interpretators (i.e. commentators) upon it. But yet in such a manner that the Oléronian Laws likewise or the Marine Customs so called may, as is practised by other Nations, be blended with it.'2

I have just described the Roman civil law as a 'storehouse'. It may prevent misapprehension if I add that the Corpus Juris in fact contains very little that is directly concerned with the sea or with shipping. But the Roman jurists had elaborated a highly developed law of contract, of obligations, and of procedure, and the underlying principles of these could be, and were, adapted to the circumstances of a changed world. It was in this way that the civil law became what Selden calls a 'promptuary' to medieval, as indeed also to modern, jurisprudence.

Law has need of arms, and commerce of protection. The doctrine of the Roman lawyers had classed the sea among the things which are common to all men,³ like the air. It could not be appropriated. International questions about territorial seas, such as in comparatively modern times set Selden and Grotius writing their learned books, could not arise so long as the whole world owned the sway of a single Emperor. The pax romana was perhaps one of the things which are too good to last. At any rate in the anarchy, which followed upon the break-up of the Empire, the sea was common

I Whitwell, 'Italian Bankers', Trans. R. Hist. Soc. (Second Series), Vol. xvII (1903), pp. 175 seq.

² The Dissertation of John Selden annexed to Fleta, p. 220.

³ Mari quod natura omnibus patet. Ulpian.

(as the author of 'Ancient Law' somewhere says) only in the sense of its navigators being universally open to depredation. Merchants accordingly were obliged to associate themselves together for mutual protection, and sent their ships out in large fleets organized for joint defence and for joint participation in all prizes that might be made in the process of defending themselves. It may well be that prizes were not invariably the result of so justifiable a proceeding. One at least of these commercial associations, the company of the Umili of Pisa, was a sort of state within a state, making conquests for its own profit, and in 1188 giving powerful aid to the princes of Antioch in return for trading privileges. There were other medieval companies of merchants wealthy enough occasionally to fit out fleets for the purpose of cruising against pirates, or ships that they chose to consider such; for after all, Quis custodiet ipsos custodes? It is commonly supposed that the usages of these fleets in such a guerra del corso laid the foundations of the later international prize-law. When we come to the Consolato, we find

already included in it provisions as to prize and contraband.

The general theory that there could be no dominion or civil power over the ocean lasted a long time; 1 but as commerce increased and national governments grew stronger, attempts were made to introduce the semblance of a reign of law upon the sea by assuming that considerable tracts of it could be treated as territory. The assumptions of sovereignty over particular parts of the sea, formerly made by various European states, are familiar to all students of history. There was that of Venice over the Adriatic, that of Genoa over the Ligurian Gulf, of Denmark over the Sound, and of England over the rather vague region designated 'The Four Seas'. Sir Henry Maine, indeed, goes as far as to say that the earliest development of maritime law seems to have consisted in a movement away from mare liberum, whatever that may have meant (and we may shrewdly guess what in the darker ages it did mean), to mare clausum. These claims to maritime dominion (we must exclude as not quite in the same category the attempts made by Spain and Portugal to monopolize the Western Atlantic and the Indian Ocean respectively in the fifteenth century), were usually based upon, or at least excused by, the alleged advantages navigators enjoyed through the suppression of piracy by the strong arm of the dominant state. A Duke of Savoy, as late as the sixteenth century, defended his levying an impost upon all merchantmen passing within a hundred miles of his coasts by declaring that he must needs reimburse himself for the expense to which he had been put in furthering this laudable object. The much earlier Venetian overlordship at any rate began with Venice sweeping from the

I Dante, for instance, stout imperialist as he was, wrote of the revived Empire, 'sua namque jurisdictio terminatur oceano'. *De Monarchia*, Lib. I.

Adriatic the Slavonic pirates who had long been levying blackmail upon her merchantmen; nor did she forget thereafter to levy toll upon the foreigner.

These claims to dominion over whole seas, culminating in the seventeenth century in what has been aptly termed a 'battle of books', are dead and gone. In the Bibliography, which follows this article, may be found the names of some of the learned volumes they evoked. There still exist, however, claims to exercise some measure of jurisdiction over a belt of sea adjoining the coast of a state for special purposes; such as the country's protection, the prevention of smuggling and the reservation of coastal fisheries to its own subjects. In the past the extent of that belt outwards was variously estimated, and the jurisdiction claimed over it included much more than the securing of such objects as have just been enumerated. Indeed the distinction between medieval ideas about jurisdiction in marginal waters and full sovereignty was sometimes rather fine. The great legal light of the fourteenth century, Bartolus of Saxo Ferrato, said that the jurisdiction extended for a hundred miles from the coast; so the Duke of Savoy, already mentioned, had at least this weighty authority on his side. At other times and places the distance was more modestly said to be as far as an arrow could fly or a cannon shoot: a certain Sicilian jurisconsult of the fifteenth century thought that the sea should belong to the sovereign land as far as it was possible to see seawards, I a rule that in a northern climate at all events would leave the sovereign with a very variable extension of his domain.

But it is time to get back to England. Before the time of Edward III the King had styled himself 'Dominus Marium', and the prevalence of disorder in the narrow seas during the years immediately preceding the battle of Sluys in 1340 is too well known to need description. In 1339 Edward sought the advice of three ecclesiastics as to the fittest laws to be enforced in maritime matters. They were Adam Murimuth, Official of the Court of Canterbury; Richard de Chadderly, Dean of the Arches; and Henry de Eddesworth, Canon of St Paul's. By reason of their respective offices these men would certainly be learned in the canon and the civil law, those two bodies of cosmopolitan as opposed to merely national law. Incidentally, it may be observed that Edward's reference to them was something like an omen of the settlement long afterwards of the doctors of the civil and the canon laws almost beneath the shadow of St Paul's, and the ultimate holding of both the Admiralty Court and the Arches Court of the ecclesiastical Province of Canterbury in the Hall of Doctors' Commons.2

Rasstad, La Mer Territoriale, p. 18.
2 Black Book of the Admiralty, Vol. 11, p. xiii. The manning of the ecclesiastical and admiralty courts by the same body of practitioners for several centuries is of course the historical explanation of the name of our modern 'Probate, Divorce and Admiralty Division' of the High Court, testamentary and matrimonial causes being formerly exclusively within the Church's jurisdiction, and justiciable in her courts.

In the same year, 1339, came Edward's declaration on the subject of the Sea of England et jus officii Admirallatus in eodem. In this the King claimed both a criminal and a civil jurisdiction inter omnes gentes naciones cujuscunque per Mare Angliae transeuntes, not only the right of keeping the peace, but of administering justice according to the laws of Oléron, to which the Memorandum expressly refers. It calls them the leges et statuta per ejus antecessores Angliae Reges dudum ordinata and recites the fiction about Richard I having ordained them. Stubbs has pointed out that Admiralty

documents of this early date are apt to be apocryphal. It is to some years within the next seventeen (1340-57) of Edward's reign that the beginning of the Admirals and their courts can be traced 'with tolerable certainty'. Perhaps it was towards the end of that period, because, as already noticed, as late as 1351 we still find a local court, that of the Mayor and Bailiffs of Bristol, sitting 'in plena curia' with nautical assessors to decide a maritime case; and the earliest record of a case actually coming before an Admiral occurs in 1357. But it is not to be inferred from this that a High Court of Admiralty existed in 1357. At this time, and onwards until the first years of the fifteenth century, there were usually two or three local admirals, 'of the North' or 'of the South and West', and each of them had courts and deputies sitting for them therein. They were very unsatisfactory courts, sometimes held in remote towns; and great irregularities took place in them, leading to endless appeals and expense. At this time appeals in maritime causes went to the Chancery, of which the clerks were usually civilians: and doctors of the civil law would be on occasion called in as assessors. This prize case of 1357 (of which we know only because the Portuguese owners appealed unsuccessfully to the King to overrule the admiral) was probably no more than a summary decision of some local admiral of the fleet or district within whose command the capture was made.3 An effort was made in 1361 to deal with a case of robbery and murder at sea at common law; but the commission of oyer and terminer, issued to try it, was almost immediately cancelled, the revocation stating that 'felonies trespasses or injuries done upon the sea ought not to be dealt with or determined before our Justices at the common law but before our Admirals according to the maritime law'.4 From this vacillation it is fairly clear that the forum of maritime jurisdiction was not even yet definitely settled. The inefficiency of the common law, however, to restore to its owners property wrongfully captured at sea, or to punish piracy, was becoming evident. And early in the fifteenth century (the exact date is not

¹ Marsden, Select Pleas in the Court of Admiralty, Vol. 1, p. lxvii.

² Prynne, Animadversions, p. 117.

³ Marsden, Law and Custom of the Sea, Vol. 1, Introduction, p. x.

⁴ Ibid. Vol. 1, p. 88.

very important) we find the jurisdictions of the several admirals merged into one High Court of Admiralty. Though the admiralties were originally meant to deal with spoil and piracy cases in the narrow seas, the centralized court (which, as already mentioned, was established and sitting at Horton's Quay in Southwark in 1410)1 soon acquired a civil jurisdiction as well. Its earlier records are lost; but when we get to them (circa 1530), the Court is dealing with suits concerning freight, general average, sales of ships and goods and other mercantile business. The frequency of the foreign suitor led gradually to the adoption of a procedure based not upon the English jury system, but upon that of the Roman civil law: indeed the fact that the Black Book contains an Ordo Judiciorum, or manual of practice, which is evidently the work of a Bolognese civilian (his first article is copied from the corresponding one in a work on procedure by the famous Bartolus) shows that the Court of Admiralty sought its models abroad from the first.2 Naturally it was from the Doctors of the Civil Law, the lawyers who had established themselves at Doctors' Commons as the College of Advocates, that the judges and practitioners in the High Court of Admiralty were drawn. They were the professional heirs of the learned ecclesiastics whose advice Edward III had sought.

Very soon after their institution the courts of the admirals began to interfere with the ancient local jurisdictions of the seaports. Many ports from time to time obtained charters from the Crown, either confirming their ancient privileges, or conferring upon them an express grant of Admiralty jurisdiction within their borders: and in a few cases even landowners obtained a grant of the right of wreck, ousting the admiral, within a specified hundred or manor. Bristol, Hull and Southampton, for example, each took this precaution in the reign of Henry VI: and Poole, as late as the sixteenth century, sought official confirmation of the town's exemption from the sway of the Admiralty Court. By this time had come into existence the Vice-Admirals of the Coast; the appointment in 1536 of a Vice-Admiral for Norfolk and Suffolk appears to be the earliest; and they also had courts which dealt with wreck and other maritime business arising in their respective counties, an appeal from which courts lay to the High Court of Admiralty. With such an abundance of local jurisdictions, clashing was frequent: a curious instance of which arose in connexion with the Moorish prize that John Dunton (having overpowered her crew) brought in at Hurst Castle in the year 1636.3

I Rolls of Parliament, 2 Hen. IV. c. Ed.

² Holdsworth, History of English Law, Vol. v, p. 125. 3 'Sallee Rovers at Winchester', chap. 11 of Naval History in the Law Courts by W. Senior (1927).

In course of time the local admiralties of the seaports dwindled into mere harbour boards. An eighteenth-century history of Poole throws light upon the contemporary condition of the maritime court held of old upon the quay there. It ought, we are informed, to sit annually, but was now held at pleasure, a phrase that speaks for itself. It concerned itself, when it did meet, with such matters as interference with oyster beds, the dredging of the fairway, beacons, and the length of time a vessel might lie at the quay after discharge. This is not maritime law but local government: just as the Articles of War, a disciplinary code for the internal governance of a fleet are not maritime but military law. Neither, of course, lies within the scope of this article.¹

The later history of the High Court of Admiralty is one of a long and losing struggle with the courts of common law for possession of the mercantile litigation of the country. What had once been intended that the Admiralty Court should be, is lucidly set out in a letter which the Privy Council wrote in 1550 to Sir John Mason, the English Ambassador in France, relative to the hearing of the claim of French merchants against English cruisers. 'Forasmuch', they said, 'as strangers are not acquainted with our laws, to show them favour the King's Highness's progenitors have thought good to set up a court of matters chanced upon the seas, or out of the realm: in the which court process is made and justice is administered according to the law civil, the which Court is called the Admiralty Court: where the said strangers' causes are examined whether the controversy be between themselves or against the King's subjects. And to the intent that strangers should have the better expedition of their causes, it is ordained that in the said court process be made summarie et de plano.'2 The scope and purpose of the court, as sketched in this instruction, were destined presently to become obsolescent. Little by little, by means of writs of prohibition issued by the common law courts, the class of cases coming before the admiralty court was curtailed. The reports of cases tried at common law in the early part of the seventeenth century include many which would formerly have been disposed of by the Admiralty court as 'strangers' causes' or 'matters chanced out of the realm'. The civilians at Doctors' Commons complained to little purpose. In 1606 Sir Edward Coke, who notoriously

2 The Council to Mason, September 1550: MS. France bundle 9. State Paper Office. See

Froude, History of England, Vol. v, p. 304 n.

I All local admiralties save that of the Cinque Ports were abolished by the Municipal Reform Act of 1835.

³ E. G. Bridgeman's case in Hobart's *Reports*, p. 11: and the Spanish Ambassador's case, *ibid.* p. 232: both suits were commenced in the Admiralty Court and removed by writs of prohibition. Their dates are not given, but Hobart, the Reporter, died in 1625.

'could not bear anything connected with the Civil Law' and hated Admiralty and every other jurisdiction that was not the common law, became Chief Justice of the Common Pleas: and though disputes about the Admiralty Court's jurisdiction were already frequent and acute, his rancour intensified them. The controversy is mixed up with Coke's opposition to King James's assertion of the Prerogative, and belongs rather to the constitutional than to the maritime legal history of England. It will suffice to say that by the middle of the seventeenth century questions arising out of freight and charter-parties, claims for building, repairing and victualling ships, and disputes about their ownership, the very matters which as we have seen I were within the province of the Admiralty Court in 1530, were being litigated in the ordinary courts. It is true that in 1648, under the Commonwealth, an attempt was made to settle Admiralty jurisdiction; and by an Ordinance the Admiralty Court was made the proper forum for such suits as well as those arising out of damage at sea.2 But at the Restoration a bill to the same effect was thrown out by Parliament, in spite of the elaborate argument of Sir Leoline Jenkins in support of it.

Pepys gives an amusing account of the attenuated occupations of the Admiralty Court when he dined with it on 17 March 1662-3. It had on that day 'only two businesses to do' and according to Pepys endeavoured to spin them out 'with the most solemnity, and spend time', as if the 'great dinner' during its midday adjournment were not enough to the purpose. At the same time it should be mentioned that two men, at least, who sat as judges in the Admiralty Court during the seventeenth century achieved a European reputation. The routine of that court was not the civilian lawyer's only furrow. Public international law, of which in time of war, prize law was a part, was still his exclusive province. Dr Zouche, who was judge in 1641, has been justly called 'the second founder of the Law of Nations', the first, of course, being Grotius, and it is recorded that the decisions of Sir Leoline Jenkins, who was judge in 1668, were in some cases taken as a guide 'by those who presided in the seats of foreign judicatures'.3 For the greater part of the next century the Admiralty Court was little more than an appanage of the Lords Commissioners for executing the Office of Lord High Admiral. The salary of its Judge was provided for in the annual estimates for the Navy; its Marshal busied himself with the apprehension of deserters from the fleet and had the custody of officers awaiting trial by court-martial: its process was employed about trivial matters of naval

¹ Supra, p. 269.

² Scobell, Acts and Ordinances, p. 147.

³ See, 'The Judges of the High Court of Admiralty', in *The Mariner's Mirror*, Vol. XIII, pp. 338 and 342.

etiquette such as bringing to book a master-mariner who had omitted to strike his topsail in the presence of a King's ship. None of these things were maritime law in the sense with which we are concerned. The truth is that with the coming, to the Common Law Bench, of judges like Lord Mansfield, deeply versed in the foreign legal learning which no lawyer outside Doctors' Commons had formerly ever troubled to acquire, the ordinary courts were fully competent to deal with cases wherein the law maritime was involved. Mansfield took no shame to defer to the marine Ordonnance of Louis XIV of France, where it might afford a useful guide, and was soundly rated by Junius for such cosmopolitan proclivities. 'You have made it your study', wrote this censor, 'to introduce into the court where you preside maxims of jurisprudence unknown to Englishmen: the Roman code, the law of nations, the opinions of foreign civilians are your perpetual theme.' All of which shows that the particular and once exclusive province of the admiralty lawyers at Doctors' Commons was being successfully overrun.

During the Napoleonic wars the civilians enjoyed 'a short St Martin's summer'. The British Fleet came to their rescue by providing many prize cases for adjudication in the Admiralty Court, at that time presided over by a great judge. The fabric of maritime international law that Lord Stowell built up during the nine and twenty years he sat there was in modern times the civilians' 'chief contribution to the jurisprudence of the world'.

This was, however, only a war-time episode. That side of maritime law (in the old sense) which springs from overseas trade in time of peace, had long been dealt with by the ordinary courts: and in 1857 the association of doctors of law practising at Doctors' Commons ceased to exist. By the consent of Parliament it dissolved itself. Thenceforward a right of audience in the Admiralty and Ecclesiastical Courts was accorded to members of the ordinary Bar. The Admiralty Court deals now largely, but by no means exclusively, with technical questions of seamanship arising out of the interpretation and application of the Regulations for Preventing Collisions at Sea and with claims for salvage; and many a moving narrative of danger and derring-do is unfolded before it. When we consider that the governments of many different States have agreed that these navigational Regulations shall be applicable to their ships upon the high seas we may surely think that, in this small field at any rate, the ancient description of the law maritime as 'ley universal par tout le monde' is still a true one.

¹ Maitland, Canon Law in England, p. 94.

A SHORT BIBLIOGRAPHY

ASHBURNER, WALTER. The Rhodian Sea Law. Clarendon Press, Oxford, 1909.

AZUNI, DOMENICO ALBERTO. Droit Maritime de l'Europe. 2 tom. Paris, 1805. (A translation into English published at New York, 2 vols. 1806.)

BAKER, SIR SHERSTON. The Office of Vice-Admiral of the Coast. London, 1884.

Bewes, Wyndham A. The Romance of the Law Merchant, being an Introduction to the Study of International and Commercial Law, with some account of the Commerce and Fairs of the Middle Ages. London, 1923.

BOROUGHS, SIR JOHN. The Sovereignty of the British Seas, proved by Records, History and the Municipall Lawes of this Kingdome. Written in the yeare 1633. London, 1651.

BYNKERSHOEK, CORNELIUS VAN. De Dominio Maris Dissertatio. Leyden, 1744.

CASAREGI, GIUSEPPE LORENZO MARIA DE. Il Consolato del Mare. Colla spiegazione di G. L. M. Casaregi. Turin, 1911.

CAUCHY, EUGÈNE. Le Droit Maritime International considéré dans ses origines et dans ses rapports avec les progrès de la civilisation. 2 tom. Paris, 1862.

CLEIRAC, ESTIENNE. Les Us et Coutumes de la Mer. Rouen, 1671.

DESJARDINS, ARTHUR. Introduction historique à l'étude du droit commercial maritime. Paris, 1890.

(The first part only, pp. 6-245, is historical.)

Exton, John. Maritime Dicaeologie or Sea-Jurisdiction in England. London, 1664, 3rd ed. 1755. GENTILI, ALBERICO. Hispanica advocationis libri duo in quo tractatu diversae illustres questiones maritimae secundum jus gentium & hodiernam praxin quam nitide perlustrantur & deciduntur. Hanover, 1613, 2nd ed. Amsterdam, 1661. (Prize cases arising out of the war between Spain and the Netherlands in which Gentili appeared in the English Admiralty Court as advocate for the King of Spain.)

GODOLPHIN, JOHN. Admiralty Jurisdiction. London, 1661.

GROTIUS (HUGO DE GROOT). Mare Liberum, sive de jure quod Batavis competit ad Indicana commercia, dissertatio. Leyden, 1609. (Published without author's name.)

- Hugo Grotius de Mari Libero et P. Merula de Maribus. Leyden, 1633.

HALE, SIR MATTHEW. A treatise relative to the Maritime law of England. Printed from a manuscript of Lord Chief Justice Hale. London, 1787.

Holdsworth, Sir William Searle. A History of English Law, 3rd ed. (rewritten). 9 vols. London, 1922-6. (The section on early Commercial and Maritime law is in Vol. v, pp. 60-

JEAKE, SAMUEL. Charters of the Cinque Ports. Translated into English with Annotations Historical and Critical thereupon. London, 1728. (A prefatory note says the book was written in

JENKINS, SIR LEOLINE. Argument on behalf of a Bill to ascertain the Jurisdiction of the Admiralty. A Charge given at a session of Admiralty within the Cinque Ports. Sept. 2, 1668. A Charge given at an Admiralty Sessions held at the Old Bailey. (Printed in the Life by William Wynne. London, 1724.)

JUSTICE, ALEXANDER. A general treatise of the Dominion of the Sea, and a compleat body of the Sea-Laws, 3rd ed. London (1710).

LINDSAY, WILLIAM SCHAW. History of Merchant Shipping and Ancient Commerce. 4 vols. London, 1874-6.

MACDONELL, SIR JOHN. Historical Introduction (pp. ccvii-ccxxvi) to Smith's Mercantile Law. 13th ed. London, 1931.

MALYNES, GERARD. Consuetudo vel Lex Mercatoria, or the Ancient Law Merchant. London, 1622.

(The best of many editions is that of 1686.)

MARSDEN, REGINALD GODFREY. Select Pleas in the Court of Admiralty. Vol. 1. The Court of the Admiralty of the West A.D. 1390-1404 and the High Court of Admiralty A.D. 1527-1545. Selden Society, 1892. Vol. II. The High Court of Admiralty A.D. 1547-1602. Selden Society, 1897.

Marsden, Reginald Godfrey. The High Court of Admiralty. Trans. R. Hist. Soc. (N.S.), Vol. xvi, 1902.

—— The Vice-Admirals of the Coast. E.H.R. Vols. XXII and XXIII, 1907–8. (The second article is a List of the Vice-Admirals of the several counties from the sixteenth century.)

-- Early Prize Jurisdiction. E.H.R. Vols. xxIV-xxVI, 1909-11.

—— Documents relating to the Law and Customs of the Sea. Vol. 1 (A.D. 1205–1648), Navy Records Society, 1915. Vol. 11 (A.D. 1649–1767), Navy Records Society, 1916.

Medows, Sir Philip. Observations concerning the dominion and sovereignty of the Seas, being an abstract of the marine affairs of England. London, 1689.

MITCHELL, WILLIAM. An Essay on the early history of the Law Merchant, being the Yorke Prize Essay for the year 1903. University Press, Cambridge, 1904.

Molloy, Charles. De Jure Maritimo et Navali: or a treatise of affairs maritime and of commerce. 9th ed. London, 1769.

Morel, Francois. Les Jurisdictions commerciales au moyen-âge. Paris, 1897.

Nys, Ennest. Les Origines du Droit International. Paris, 1894. Pages de l'histoire du droit en Angleterre. Le droit romain, le droit des gens et le collège des docteurs en droit civil. Brussels, 1910.

Pardessus, Jean Marie. Collections de lois maritimes antérieurs au XVIIIe siècle. 6 tom. Paris, 1828-45.

RAESTAD, ARNOLD. La Mer Territoriale. Études Historiques et Juridiques. Paris, 1913.

Reddie, James. An historical view of the Law of Maritime Commerce. Edinburgh (printed) and London, 1841.

Reeves, John. A History of the Law of Shipping and Navigation. London, 1792. (A History of the various 'Navigation Acts'.)

ROBINSON, SIR CHRISTOPHER. A translation of the Chapters 273 and 287 of the Consolato del Mare relating to Prize Law. London, 1800.

Roscoe, Edward Stanley. Admiralty Jurisdiction and Practice. 4th ed. London, 1920. (Historical Introduction, pp. 1-44.)

—— A History of the English Prize Court. London, 1924. (With frontispiece reproducing Ackerman's print of a court sitting at Doctors' Commons.)

SARPI, PAOLO. Del Dominio Del Mare Adriatico. Venice, 1676.

Selden, John. Mare Clausum. London, 1635.

Senior, William. Doctors' Commons and the Old Court of Admiralty: A short history of the civilians in England. London, 1922.

—— The Beginning of Sidelights. The Mariner's Mirror, Vol. 111, 1913.

— The Law and Custom of Flags. Law Times. Vol. CXLII (1917), pp. 166 et seq. and 183 et seq.

—— The Master-Mariner's Authority. Law Quart. Rev. Vol. xxxiv, 1918.

--- Ransom Bills. Law Quart. Rev. Vol. xxxiv, 1918.

-- Early Writers on Maritime Law. Law Quart. Rev. Vol. xxxvII, 1921.

Spelman, Sir Henry. A Tract of the Admiralty Jurisdiction and the officers thereof. (Collected Works, ed. Gibson, Part 11, pp. 217-32, London, 1723.)

Twiss, Sir Travers. Monumenta Juridica. The Black Book of the Admiralty. 4 vols. London, 1871-6.

Valin, René-Josué. Nouveau Commentaire sur l'Ordonnance de la Marine du mois d'Août, 1681. 2 tom. La Rochelle, 1766.

Valroger, L. de. Étude sur l'institution des Consuls de la Mer au moyen âge. Nouvelle Revue Historique de droit français et étranger, Vol. xv (1891), p. 36.
Walker, Thomas Alfred. A History of the Law of Nations. Vol. I, University Press, Cambridge,

1899. (No second volume published.)

Welwon, William. An Abridgement of all Sea-Lawes: gathered forth of all Writings and Monuments which are to be found among any people or Nation, upon the coast of the great Ocean and Mediterranean Sea. London, 1613.

Welwod, William. De Dominio Maris. The Hague, 1653. (This pamphlet was answered by the Dutch civilian Graswinckel in Maris Liberi Vindiciae adversus Gulielmum Welwodum Britannici Maritimi Assertorem.)

ZELLER, HEINRICH LUDWIG. Das Seerecht in den Assisen von Jerusalem, nach der Handschrift

Venedig. R. Biblioteca Nazionale di S. Marco.

— Das Seerecht von Oléron, nach der inkunabel, Tréquier, Paris, Bibliothèque Nationale. Réserve F. 2187.

- Sitzungsberichte der Heidelberger Akademie der Wissenschaften. Band 7, 1916.

ZOUCHE, RICHARD. The Jurisdiction of the Admiralty asserted against Sir Edward Coke's Articuli Admiralitatis in Chap. xxII of the Jurisdiction of Courts. London, 1663.

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SIDELIGHTS ON THE LIVERPOOL SLAVE TRADE, 1789-1807

By Vera M. Johnson

OST published works on the Slave Trade have dealt with either the statistics of the Trade or with Mr Wilberforce and his fight for Abolition. There have been very detailed accounts of the rise of the Slave Trade in Liverpool, and several volumes of Liverpudlian memoirs have given their authors' personal experience of the African Trade, as it was sometimes called, but none of these writers has said much about the everyday business of slaving, the ships, crews, etc. In the Picton Reference Library, Liverpool, are letters, accounts and journals (including a ship's log from which it is possible to work out her course) which throw some light on these matters, and it is upon these manuscripts that this article is based.

The Liverpool of the 1790's had so many busy citizens profitably connected with the Slave Trade that it was considered a quite proper and reputable occupation. The son of one such person afterwards declared:

Although a slave captain and afterwards a privateer, my father was a kind and just man, a good father, husband and friend. His purse and advice were always ready to help and save, and he was consequently much respected by the merchants with whom he had intercourse.³

Substantial merchant firms engaged in the Trade included such names as Neilson, Timperon, John Shaw, William Forbes, F. P. Grayson, Ingram, Rodie, Thomas Clare, Thomas Leyland, etc. Thomas Leyland and Co. were a typical firm, and records of three of their ships, the *Enterprise*, *Lottery* and *Fortune*, show that they were used for both slaving and privateering. On one voyage the *Enterprise*, an 18-gun ship,

Sailed from Liverpool 20th July 1803.

August 26th detained the Spanish brig 8t Augustin, Captain Josef Anto. Ytuno, in Lat. 22.47 North, Long. 26.14 West, bound from Malaga to Vera Cruz, which vessel arrived at Hoylake on the 25th October.

September 10th recaptured the *John* of Liverpool in Lat. 4.20 North, Long. 11.10 West, with 261 slaves on board and on the 2nd November she arrived at Dominica.

September 23rd the *Enterprise* arrived at the Havanna and sold there 392 negroes. On the 28th March she sailed from the Havanna and arrived at Liverpool 26th April 1804.

2 Liverpool and Slavery, Life of Captain Crow, and Liverpool a Few Years Since. 3 Recollections of Old Liverpool.

I True Causes of the Liverpool Slave Trade; also History of Liverpool by Thos. Troughton.

Privateering was not the main object of this voyage, the Captain having been ordered to proceed to Bonny and buy slaves (as few females as possible). He was to be careful to buy young negroes as he might have to go to Jamaica where a duty of £10 per head was charged on slaves over twenty-four years old. He was also to buy palm oil if possible as it was scarce and would fetch a good price. The owners' instructions concluded:

We request you will keep strict, regular discipline on board the ship, do not suffer drunkenness among any of your officers or crew for it is sure to be attended with some misfortune, such as insurrection, mutiny and fire. Allow to the ship's company their regular portion of provisions and take every care of such as may get sick.... You must keep the ship very clean and see that no part of her stores and materials are embezzled, neglected or idly wasted.

The Enterprise made three privateering cruises in 1779-80. Her captain received exact orders where to cruise and for how long. Prizes were to be sent with a prize-crew to Ireland. Letters and papers were to be sent home after examination, together with any money and valuables taken. Passengers were to be interrogated separately for information, there being more likelihood of the truth being discovered in that way. Concerning the treatment of prisoners, the owners wrote:

We particularly recommend that the prisoners be not plundered of their Clothes and Bedding, but that they may be used with all tenderness and humanity consistent with your own safety which must be strictly attended to; and as true courage and humanity are held to be inseperable we hope your crew will not be wanting in doing that honour to their Country, the contrary of which is disgraceful to a civilized nation.

The capture of a prize was once used as an excuse for a trip home. Maybe the crew had hoped for Christmas ashore, but the proceeding called forth a stern reprimand:

Liverpool. 17.11.1779. Captain Haslam, Sir, It is our positive orders that in case of your taking another prize that you do not return to Liverpool on any account or pretence, but that on your taking a Capital prize of not [less] than ten thousand pounds, you are to convoy her into the first port in Great Britain or Ireland—and further you are expressly ordered to continue your cruise for five months from your departure now from the Rock, as by the Custom of the Port the detention in the River is not included in the time allowed for the cruise. We depend on the conduct of you and your officers to carry a proper Command on board the Vessel and to prevent any Disobedience or further attempts to Mutiny.²

The expense of fitting-out the *Enterprise* was divided among ten people, having sixteen shares between them. Prizes and their cargoes were auctioned and three-quarters of the net sales went to the owners while one-quarter was apportioned to the officers and crew in shares stipulated by an Article of Agreement between the Master, Officers, Mariners, Seamen and Seafaring

¹ Leyland Letters.

² Ibid.

Men. Victuals were also covered by the Agreement, the weekly allowance; being:

Sunday 1½ pounds beef containing 16 ounces to the pound, and ½ pint of flour. Monday 1 pound pork and ½ pint of Pease. Tuesday 1 pint oatmeal and 2 ounces of butter, and 4 ounces of cheese, or 1 pound of Stock Fish with ½ pint of oil and ¼ pint of vinegar in lieu of butter and cheese. Wednesday same as Monday. Thursday same as Sunday. Friday same as Monday. Saturday same as Monday. Each person besides to have 6 pounds of bread per week and ¼ pint of wine per day during the voyage. In lieu of Pease and Oatmeal shall be served Rice, Indian Corn, Yams or Calavances.

The record of only one voyage of the ship *Lottery* is available. She sailed from the North-West buoy on 6 July 1798, arrived at Bonny 22 August, and passed Barbados on 27 November after a passage of 50 days with 460 negroes. Her cargo sold at an average of £95 per head, the total receipts for 452 slaves being £41,793. 13s. 4d.² One blind slave was given away.

The Fortune, the third ship in Leyland's records, made a highly successful,

though very long, slaving voyage in 1805-6.

She sailed from Liverpool
Arrived at Congo River
Sailed from Congo River
Arrived at Nassau
Sailed from Nassau
Arrived at Liverpool
25 April 1805
16 July ,,
10 Novr. ,,
21 Decr. ,,
29 March 1806
2 May ,,

She had a cargo of 343 negroes and sold 340 for £35,338. os. od. Two of the remaining three died, and the third, King Cross, was apparently taken on to the pay-roll as he is entered as receiving 1s. a day and was also given two shirts. The slaves brought high prices averaging: man, £115; man-boy, £100; boy, £96; woman, £110; woman-girl, £100–110; girl, £96. One man slave who was old and sickly was disposed of for £64.3 The ship carried Letters of Marque and was issued with the usual instructions regarding prizes, but there is no evidence of her having met any enemy vessels. While at Nassau she lost thirty-four of her crew either entered or impressed into the Navy. Two men 'ran' and one died. Nineteen new seamen were taken on and a certain Andrew Pearson was paid £24 'for his trouble in procuring twelve of the seamen'.

Cargoes for the Slave Trade consisted of a variety of goods likely to appeal to African chiefs. The articles included: China silk handkerchiefs, green bandannoes, yellow bandannoes, chelloes, cuttanees, romalls, palluats, Turkey plads, cushtoes, chuconas, sateens, Gambia fringe, beads (round mock corals, blue agates, blue china, burdo), scarlet and striped worsted caps, arms, powder, rum, rice, split beans, brandy, wine, iron hoops, knives

I See Appendix (a).

² See Appendix (b).

³ See Appendix (c).

and razors, earthenware, carpets and salt. The carpets seem a strange item in a Guinea cargo, but it is possible that they were intended for the Europeans on the Coast. The cloths and goods with the exotic names were products of Manchester and India.

The Slave Trade was not entirely in the hands of large firms, and Robert Bostock of Liverpool was an example of the smaller trader. In 1783 he was master of the slaver Bloom, but by 1789 he had become owner of several sloops and schooners, notably the Little Ben, 75 slaves; the Jemmy, 138 slaves; the Bess, 220 slaves, and the Kite, number of slaves unknown.² The vessels carried the usual cargoes to the Coast and there loaded ivory, gum, camwood, gold, tortoise-shell, etc., according to home needs. These varied, and the demand fluctuated in agreement. Camwood, for instance, was not worth buying in 1789 as it sold for only £10 a ton in England. Later it was selling at £25 a ton. Gum, also in 1789, brought 3s. a lb. but at another time was unmarketable. The same year (1789) ivory was quoted at £20 a cwt.

Having bartered their outward cargoes for slaves, Bostock's ships made the Middle Passage to the West Indies. They traded at Grenada, Dominica, Barbados and Jamaica. Their Jamaican port was usually Montago Bay on the north side, where prices were higher, although going there lengthened the voyage. The negroes were sold on bills at 6, 9,12 or 15 months sight and if the captains could not achieve a quick sale the slaves were placed in the charge of agents. A captain usually had a written agreement with the agent, if he had not he risked being caught over the price of the slaves. Bostock cited as a warning the case of the captain of the *Ned* from New Calabar who was promised £36 a head for his cargo but, because he had no agreement, received only £31. When the business of selling the negroes was completed the ships sailed for home with cargoes of sugar, rum, coffee or cotton, whichever was available.

1789 was a poor year in the Slave Trade, averaging £36, £37 or £38 a head. Bostock was very worried and appears to have had good reason to be. Two of his vessels were overlong on the Middle Passage and suffered much mortality (the Bess took ten weeks and lost sixty-four slaves). Then there was an unfortunate blunder over the sale of some empty rum puncheons. They were in bad condition and fetched only £6. 17s. od. and had cost £9. 5s. 4d. Bostock was indignant: '...I wish you had not sold them...I wou'd rather they had been made a fire of....' He urged his captains, though without much hope, to ask £40 a head for their cargo, commenting, 'You can always drop when you can't rise.' He complained that times were bad, and after an unprofitable venture wrote, 'I am sorry to

¹ Leyland Accounts.

² Bostock Letters.

say this has given me enough of West India adventures.' But he did not withdraw from the Trade. Instead, he scolded his captains, who evidently needed it, and sent urgent entreaties to his agents to do their best in his interest. The captains spent far too much, in his opinion. To one he gave anxious advice '...you will be carefull in your disbursements in the West Indies....I do not expect they will be so much as the last for they was shameful indeed.' On the Windward Coast slaves were scarce and expensive. Bostock's agent at Bananoes, James Cleveland, was consequently prodded:

I have been obliged to give a large premium on the *Kite* as I was short insured on account of no accounts of her arrival; I think it wou'd have been better for you and me had you sent her off with a few slaves and brought a cargo of rum and tobacco back...[from the West Indies]...as you know, quick despatch is the life of trade.

He ends plaintively:

I have had many anxious hours this year, I wou'd not wish the same again for double the profits I may get, if any; you shou'd take it into consideration it is a heavy concern upon one person, and now everyone that knows you asks, Well, how does your Old Friend do? Why, what's the matter, he pays others before you—which makes me look simple and don't know what to say.

The sloop Kite caused him anxiety, several commanders expressing the opinion that she was not seaworthy. Eventually she was condemned in the West Indies and sold with her cargo, the underwriters taking the proceeds. She was insured for £500. Bostock considered the affair ill-managed, and pointed out to her captain that he should have bought the cargo of slaves himself, on Bostock's credit, as they would be going cheaply and the two of them would have made a good profit. About this time, Captain Williams of the Jemmy died and another man was sent to join the ship at Bananoes on terms of f,5 a month and the privilege of one slave. Bostock was not too happy about his captains, some of whom were of rather dubious character. One guileful fellow sold a pipe of wine to James Cleveland but omitted to deliver it, also a number of gifts entrusted to his care failed to reach their intended recipients. On hearing of the wine Bostock exploded wrathfully: 'I believe him to be a damned scoundrel and it is a great loss to me that I ever knew him, but I think he may walk Liverpool streets some time before he gets another vessel or berth.' Later he lamented to Cleveland of being ill-used by a pack of rascally captains. 'The Gentleman you put in at the Bananoes cou'd not be content with the two slaves he received froo for but expended f.40 for his cabin stores.' This 'Gentleman' also was prophesied to walk the streets.

Bostock's money was all tied up in his ships, and when they were long absent he felt the want of partners to share the burden. Often agents were slow in settling-up after sales and Bostock had to make repeated applications for payment, sometimes accompanied by a mild threat, '...you had better

settle without trouble'. This letter had a dignified postscript, 'A Gentleman's Word ought to be his Bond.' Unfortunately, there is nothing to show whether the rebuke stung the tardy one into paying his debts. In 1791 James Cleveland died, leaving bills amounting to £1237. 3s. od. owing to Bostock. It was ultimately arranged that the sum should be paid by instalements. Despite his much-bewailed ill-usage, Bostock managed to keep going. Indeed, in 1790 he built a schooner to hold 130 slaves, and the Femmy was lengthened 18 ft. to take 260 slaves. There were rumours of war that year but they were not generally believed. The price of slaves was creeping up to an average of £39 to £41. The looming threat of Abolition sent up the prices still further until Bostock began to think optimistically of £80 or £90 a head. He bought a brig and sent her to the Verde Islands, his son Charles sailing in her to see that part of the world. An alarming famine had broken out in the Islands and Bostock hoped that the brig would offer the inhabitants some relief. A little later he noted that the Garland was lost on the Coblers Rocks but her slaves were saved and sold for upwards of f.40. In 1792 he was '... in hopes that the Africa Trade will not be abolished as the Duke of Clarence has taken up the cudgells against Abolition'.

Bostock does not seem to have paid his captains the commission allowed by the larger owners, which may account for the malpractices he so bitterly deplored. There would probably be the usual advances before sailing; he certainly made small payments to some womenfolk while the vessels were

away. He had a 'List of Pentioners' as follows:

Mrs	Fryer	£4	4	0	per	month
,,	Litherland	I	10	0	"	"
	Coventry	I	I	0	22	29
,,,	Harden	I	I	0	"	"
"	Rutter	I	I	0	"	22
"	Davidson		10	0	,,	"
22	Evans		IO	0	22	22

Mrs Fryer was the wife of the captain of the Little Ben. The others were of less exalted station.

In correspondence Bostock interspersed his business letters with personal affairs. He would instruct a captain or agent on some matter of cargo, and follow the order with a piece of gossip such as 'Ratcliff's lady where you spent an evening and got lamed is dead; so he is a brisk widower.' Or he tells Captain Williams: 'Your affair with Jenkins is not settled, he is out of gaol and I suppose intends paying you a visit on the Coast.' Again: '...inform Mr Cleveland his old friend Lyon is dead but his death not much lamented.' He was not always tactful, as when he wrote to Captain Fryer: '...our friend Greetham whom you sent to make your Insurance declared he would have nothing to say to you nor any such drunken man.'

That he sometimes talked too freely is shown by a long and incoherent letter full of self-justification and reproaches:

I am inform'd by Mrs Clements that Miss B. W. had told her that you inform'd her that I had mention'd to you about the report that was going about in Town of her and that she is very much displeased at me and thought the friendship betwixt her and me I might have mention'd it to her. I certainly wou'd if I had put any credit to itt but as I thought it was a false report, and you mentioning to me that Mrs Dickinson had sent for you about it, I am much surpriz'd you shou'd draw my Name in Question about it as I apprehend it will create ill blood betwixt her and me and the whole Family which wou'd give me a deal of uneasiness as I had always a great regard for them. As you open'd your mind so freely to me was the reason of mentioning what I had heard, but little thought you wou'd have mention'd it to her or else wou'd have said nothing....

It is to be wondered whether Mr Bostock, chastened by the lady's displeasure, learned to treat scandalous tales with caution. But, if garrulous, he was kind, and demonstrated his friendship for anyone by practical gifts. Captain Williams received a sack of potatoes with the promise of more to follow. To James Cleveland were despatched seven casks of potatoes, one cheese, one hamper of onions, apples, and one round of beef, '...thinking you might like some of the produce of this Country'. On the birth of an heir to James Cleveland, Bostock sent his congratulations and expressed delight when the infant was named after him. He offered to care for the child's education if he was sent home to school and assured Cleveland that he was always fighting hard battles on his behalf. He suffered occasional afflictions; he once begged to be excused for a 'scanty epistle' on the plea that he had been ill with gout for two months and had not heard any news of the town. He was a family man with six children and a wife whose best respects he always included in his letters.

The Bostock correspondence ends in 1792 so that it cannot be known whether he enjoyed the prosperous days of the 1800's when the price of slaves rose to as much as £116 a head.

Vessels used in the Slave Trade were fast ships specially built for the purpose, and, in order to avoid sailing in convoy during war-time, Letters of Marque were often taken out by their owners. The crews were well paid but a slaver rarely finished a voyage with the same crew as she began. Some men were usually lost to the Royal Navy, which made a practice of impressing merchant seamen in the West Indies, and death and desertion accounted for others.

It was customary for the captain, 1st mate, and surgeon to receive only nominal wages. The terms on which they were engaged are illustrated in the following extracts from a letter to a captain:

You will receive from the Factor your Coast Commission of £2 in £102 on the amount of the gross sales, and when this sum together with your Mate's average slaves, and your Surgeon's head

money and average slaves are deducted, you are then to receive £4 in £104 on the remaining amount. Your Chief Mate, Hugh Bridson, is to receive two slaves on an average with the cargo, and your Surgeon, James Muir, is to receive the usual head money of 1/- on each slave sold and two slaves on an average with the cargo, in consideration of which commissions and emoluments wou are not to carry on any private trade or suffer any of your officers or crew to do so, on your their accounts, under a forfeiture of the whole of your commissions arising on the voyage.

The surgeon was an important member of the ship's company. It was his duty to examine the negroes before purchase, making sure, so far as was possible, that there was no disease among them, a very necessary precaution as sickness spread quickly and could decimate a cargo. The surgeon also guarded the health of the slaves during the Middle Passage and was expected to produce his charges in a fit and lively state at the end of the voyage.

Sometimes a Trading Mate was carried who represented the owners and dealt with the business of buying and selling, also, possibly, keeping an eye on the people entitled to commission and privileges to see that they did not break their agreements. The highest paid member of the crew was the carpenter. It was his work to erect the barricades before taking slaves aboard. When the slaves were landed he cleared out the holds and prepared them for loading the homeward cargo. The cooper came next on the wages list. In addition to his ordinary duties he attended to the irons used for shackling the negroes. Seamen were paid a pound or so more than threequarter- and half-seamen, the two latter groups being less experienced sailors. As for the 'landsmen' they must have been the scourings of the dockside sent aboard by the crimps. I They might even have been criminals.2 Apprentices serving in slavers were apparently enriched in nothing but experience. Crews were paid three months' wages in advance. Voyages were an average of eleven months, a man would therefore pay-off with eight months' wages less various deductions such as further advances during the voyage or slops sold to him. On the residue of this money and his advance his family had somehow to survive until he came home again.3

When the ships in which these rough and hardy seafarers were embarked together were ready for sea they slipped from Liverpool river on the first favourable wind and made a course for Africa. On 1 November 1789, the brig Ranger left the Mersey on a slaving trip. She called at Lisbon and sailed again on 3 December for Annamaboe.⁴ This place is not marked on modern maps but from the position mentioned in the Ranger's log (4° 45′ N., 8° 20′ W.) would appear to be somewhere about the present boundary between Liberia and the Ivory Coast. After leaving Lisbon the Ranger made

^{1 &#}x27;Crimpage' was a frequent item in ships' accounts.

² The Lottery's accounts include £20. 14s. 7d. 'for 5 men taken from the prison ship'.

³ See Appendix (d). 4 Log of the Ranger.

westing to the meridian of Madeira Islands and at noon, 10 December 1789, came into light winds in the vicinity of the Azores anti-cyclone (a more or less permanent atmospheric condition) when the days' runs dropped until the North-East Trades were picked up on 15 December. Course was then adjusted to pass near St Vincent Island, which was reached on 19 December. Course was steered to the southward for a day. The following nine days are missing from the log, but it can be concluded that when south of the Verde Islands (21 or 22 December) course was steered direct for Annamaboe Roads. The Ranger had followed a much-used route, i.e. from Lisbon to about 31° N. Lat. and 19° W. Long., then west of Verde Islands, with the final leg an easterly run-in to the coast. By passing to west of St Vincent Island (Verde Islands group) she benefited from the equatorial current when running down her easting, and also avoided attacks by the shore-based pirates who infested those waters.

On arrival at the coast the protracted business of collecting slaves began. An approach was made to the local chief, who had to be given presents. If he approved of the gifts he produced some negroes, prisoners taken in intertribal warfare, and started to bargain. Slaves were not always available in bulk, and a considerable time might be spent in accumulating a cargo. The Ranger's log gives a day-to-day picture of the process. She entered Annamaboe Roads on 23 January 1790 in company with the Gregson. Trade was slow at first and the crew (referred to as 'the people') were put to necessary work about the ship and to preparing for the reception of slaves. Water was taken on board from an American ship in exchange for rum and stowed in the holds in gang casks. Some goods were taken off from Annamaboe Fort and guns were brought from shore. Slaves were bought

in ones and twos.

The 'people' sometimes behaved with a certain lack of decorum. On 31 January the log records a distressing affair:

Mr Christian Freeze bestowed illiberal and mutinous language to Mr Woods the 2nd Mate, upon which the Captain, overhearing the conversation between them, desired said Freeze to desist in those proceedings to the officers of the vessel, upon which orders he the said Freeze gave the Captain of the said vessel abusive and ill language. It appeared upon investigation that the said Christian Freeze and one George Hall, another seaman belonging to the said brig, had been employed in the hold in assisting the said Mr Woods but, he being obliged to leave them in the hold, they thereby taking advantage of his absence embezzelled part of the cargo of rum that lay in the hold, whereby they became intoxicated, and for the ill conduct and drunkenness of the said Freeze and intoxication of the said George Hall their allowance of rum was (by the desire of the Captain) ordered not to be given to them until the expiration of 8 days as a punishment for their behaviour above expressed.

February opened quietly with little trade. The people were employed 'starting the rice out of the gang casks into one of the bean rooms'. The

cooper busied himself cleaning the rusty guns. The days were made of small of things: a canoe was sent to Cape Coast for water, none being obtainable at Annamaboe; they had fresh fish for dinner in lieu of pork and pease or in filieu of beef and flour; coal was moved from a room by the mainmast to the chold before the foremast; the cooper, having furbished-up his guns, began making anchors. On 19 February more trouble descended on the unfortunate Mr Woods:

Daniel Chieves behaved in a mutinous manner to Mr Woods, the 2nd Mate, and all the people are charged by the confession of the boatswain for making away and embezzelling the cargo of Liquor on board the brig—and on Monday last some or one of the officers or people broke into the hold and broached a puncheon of brandy which lay therein by boreing a hole with a gimblet and thereby drawed off a quantity of the liquor.

The situation was dealt with firmly by the captain, who despatched a messenger to the Commodore at Cape Coast to make a complaint against the people. On the 22nd retribution in the person of the Commodore overtook the malefactors, and the supposed ringleaders and mutineers were haled aboard his vessel and taken away. After this upsetting diversion routine was resumed. A few days were occupied in drying damaged powder which was unfit for sale. The weather was varied by an occasional tornado. The trickle of slaves increased slightly and during March 10 men, 7 women, 3 girls and 1 boy were bought. The gain in women was rather offset by a transaction on 20 March whereby two women slaves and one small anchor were bartered for four puncheons of rum. 150 billets of firewood, coals, and three gang casks of water were put aboard the Gregson and on 8 April both ships sailed for Cape La Hooe. There, 26 slaves were sent on to the Gregson which then sailed to leeward with one month's provisions. At this stage gold began to appear, but not in much quantity. The Ranger moved along again by a day's sail, coming to an anchor in 13 fms. 'Cape Appalonia bearing NBW, distance two miles'. They picked up more gold, then pottered along the coast to 'Pickeneney Bassam', anchored, traded for gold, got under way, anchored again in 13 fms. 'Grand Bassam one mile BNE'. And so the wandering up and down in search of slaves and gold continued throughout May.

June opened with bad weather and the people were busy afterwards drying the sails, drawing yarn to make 'platts' for cables, scraping the masts and cleaning the sides of the ship. The *Gregson*'s boat came down from windward and was given wood and water, 16 ankers of rum, 12½ ounces of powder and some provisions. The two-ship convoy then got under way and arrived back in Annamaboe Roads on 10 June. While they were there the new *Princess Royal* from Liverpool came to an anchor. She remained only two days, then sailed for Bonny. The same day a schooner for the

Sarah came in. On 17 the schooner April from Liverpool and a tornado

arrived together.

The following week the Ranger was made ready for sea. She was provisioned with 73 puncheons water, 16 gang casks water, 600 cws. beans, 90 cws. rice, 357 cws. corn, and 6000 billets of firewood. On 26 June she received from the Gregson 103 men, 50 women, 15 boys, 14 girls, and I female infant. Then, her human cargo complete, she made sail and started on the Middle Passage. She made a track towards the Equator, which she reached on 6 July, having made a course of S. 60° W., distance 564 miles. From there she continued on a track somewhat to south of the Equator, curving south to 3° 23' S. Lat. on the 15th having made a course S. 78° W., distance 943 miles, her longitude being estimated as 31° 47' W. From this position her track curved back towards the Equator which she again crossed on 25/26 July at Long. 49° 13' W. (estimated from log) having made a course from Thursday the 15th of N. 79° W., distance 1067 miles. This is a position off the mouth of the River Amazon. She then 'coasted' and on 4 August reached a position Lat. 9° 2′ N., Long. 59° 27′ W. having made an average course of N. 48° W. from her 25/26 July position. On 10 August she had reached a position Lat. 13° 19' N., and Long. 70° 35' W. having averaged a course of N. 69° E. The probability is that she entered the Caribbean (or West Indian) Sea northward of Trinidad Island and southward of Grenada Island. From her 10 August position she made westing until the 15th when she was near the meridian of Jamaica in Lat. 121° N. and made northing with a favourable wind towards Port Royal, Jamaica, arriving there probably on Monday 23 August 1790, a total passage of 58 days.

On the speed with which the Middle Passage was made depended the condition of the negroes on arrival at the port of sale. A long passage sometimes meant a heavy death-roll. The Ranger's 58-day run was not

very quick, but, on the other hand, it was not abnormally long.

During the Atlantic crossing cargoes were adequately cared for. A list of Slaves' Expenses for the ship Fortune included pease, rice, corn, offals, cod fish, beef, plantains, yams, oranges and sugar. There were also such homely items as clothes ('shirts and trowsers'), tobacco, pipes, three iron pots and salt and vinegar. The medical supplies were hartshorn oil, castor oil and rhubarb, oil of jallop, lavender and peppermint, calomel and 'one dozen port wine for sick slaves'. It did not say whether the surgeon went his rounds on Saturday nights armed with spoon and castor oil bottle. Slaves were kept in the open air during the day if the weather was fine. They did their own cooking in the iron pots provided. Sometimes they were employed on tasks about the deck. At night they were shackled and accommodated

on wooden shelves in the holds. Owners' instructions to Captains always stressed the treatment of slaves:

...allow them every indulgence consistent with your own safety and do not suffer any of your officers or crew to abuse or insult them in any respect.

...above all enforce humane treatment of them on the Middle Passage.

They were to be kept happy so as to arrive 'in health and spirits', a healthy negro being more valuable than a sick one.

No doubt all this businesslike humanitarianism was pointed to with righteous fingers by the Slave Traders during the battle for Abolition. The port wine must have been a particularly effective instance.

Slaves were sold as soon as landed. An eye-witness account of a slave market in Pernambuco gives the following description:

On the arrival of the vessel at the Brazils the slaves are immediately landed and drove the same as a flock of cattle to a large stone for the purpose [of sale]; the women have a small piece of red flannel or black cloth about their loins, scarcely sufficient... the men wear a small piece of cloth in a much similar manner only that it is fastened before and behind by a small piece of string.... In this dress they remain while unsold and every morning they are brought into the street fronting their habitation, guarded by several keepers at each extremity; about sunset they are drove in, counted and the doors locked. In the middle of the street they cook their victuals which is little more than Farina (flour made of Indian corn) and heads of Indian corn. They are frequently employed spinning cotton with a small bobbin, which is made into cotton bagging.

Any person wishing to purchase a slave or slaves, attends the market and selects from the number male or female, or both, as many as he may require, previously examining them all over to ascertain if they are sound and healthy, and in this point there is no degree of delicacy used. The bargain being made, the purchaser drives them off. The slaves appear to be glad when purchased except when man and wife, parents and children, brothers and sisters or other branches of the family are separated, which frequently occurs and causes a most melancholy scene but this has little impression on the callous hearts of the purchasers. They are sold at different prices according to the quality, differing from £20 to £100 each; they are valued much higher for the Provinces they come from, a race of them are called Minas and those are the highest in repute being the best tempered, strongest and healthiest men; the Angolas are the next in repute and I believe those from Mozambique are considered the worst as being weak and sickly or more apt to give way to despondency and commit suicide.

The Slave Trade was abolished in England in 1807. After that year it was forbidden to import slaves into British possessions although it is probable that a certain amount of illicit traffic in flesh-and-blood still went on. Abolition in England did not, of course, affect other countries and a considerable trade was carried on between Brazil and the African Coast south of the Line, mainly with the provinces of Loango, Congo, Angola, Benguela and Mozambique.

Nearly twenty years after Abolition, in 1826, Captain Pinder of the ship *Crown* called at Maranham in Brazil and while there made very searching inquiries into the condition of the slaves, noting his findings in

a diary he kept throughout the voyage, and comparing slavery in Brazil and Demarara. His diary shows Captain Pinder to have been a sensible observer, although rather given to moralizing; he certainly had a taste for high-sounding phrases and when thinking of home he quotes: 'England with all thy faults, I love thee still', and goes on, 'The love of my Country shall always endear me to it. I shall ever bless the day I was born an Englishman. Long may she rear her sublime head with majestic empire triumphantly over the surrounding nations and sway with humility her trans-Atlantic rivals.' Such unblushing patriotism may possibly have biased the captain in favour of his own countrymen but, on the whole, his views deserve consideration. He writes:

The greatest part of the slaves are employed at the plantations, where they have a hut and a small piece of ground given them, the latter they work at on Sundays and Holy Days. They very soon learn the Portugese language and immediately embrace the religion of their masters, Roman Catholic. On their arrival at the plantation they are baptized. On some estates I am told there are 140 slaves and on a common sized estate about 50 will be sufficient. They perform all the duty required in cultivating the land, and are at work about twelve hours of the twenty-four. They are allowed to marry, but not without their master's consent, their children are the property of their masters and I believe the law directs that after a female slave has reared the children she is entitled to her freedom.

Wretched as the negro is considered by Europeans yet he is not so badly off as is thought. If industrious from the little garden given him by his owner, he may in the course of several years, by the sale of his surplus of fruit and vegetables, provide himself with means of purchasing his freedom, and by law he can demand it by paying his owner the sum he gave for him.

The priests take a great deal of money from them on religious superstitions, and they are very apt to squander it away in the celebration of religious festivals. After marriage they live together very comfortable and I am informed are very faithful to each other, an instance of infidelity rarely occurs. The mother brings up the children in the best possible manner she is able, they run about naked until about nine or ten years of age and as soon as capable they are placed at some light work.

That cruelty and tyranny exist among the slave holders is too true, and to witness the treatment that some receive makes the blood run cold. It appears very strange that the principal part of the slaves are unwilling to purchase their freedom, particularly those who are well treated. They are, of course, provided for and they imagine if they were free they would be reduced to want and would be unable to find employment. They are most faithful to a master that uses them well, and in governing a set of negro slaves there is a certain medium to be observed; if a strict authority is not supported over them they will very soon become refractory, insolent and disobedient.

The slaves that come from Africa in the same vessel are always most sincere friends.

If the picture presented by Captain Pinder of the slaves in Brazil is comparatively bright, the picture of their lot in Demarara is radiant. Before going there himself he questioned a Mr McDonnell, who had been there, on what a visitor would see, and learned that:

In the place of beholding that scene of chains and cruelty which had been associated with his ideas of slavery, he finds everything indicative of cheerfulness and content. An active, animating picture of industry lays before him; every now and then is heard the loud and general laugh, evidently that of persons free from care. In his walks about the grounds he is saluted with courtesy and he sees the proprietors received really with affection. After the work of the day is

well fitted up and comfortable; the little children before the door gambolling about in sportive nnocence, and the whole presenting such an appearance of satisfaction and happiness that he is at once prompted to exclaim 'What is it Mr. Wilberforce would have!' And let us not at all events overlook what to every beholder must appear plain and convincing—that the negroes possess a very great degree of comfort and that if nothing came across their minds about liberty granted to them from this country they would be very generally contented and happy. I am persuaded that there is not a person who has visited the Colonies who does not entertain a same belief. Individual cases of hardship and cruelty are to be found; where is the Country they are not?

The slaves' diet was salt fish and plantains and when fish was scarce they were given beef and pork. They kept poultry and pigs for their own use. Each slave received one suit a year and they vied with each other in being well-dressed on Sundays. The women were given needles; they did no hard work for several months before and after childbirth. Mr McDonnell noted a great want of affection between man and wife, the men being apt to treat their women cruelly, but if not kind husbands, they were as faithful as their fellows in Brazil. Sick slaves were nursed in clean and well-run hospitals. In his diary Captain Pinder observes tartly, 'I wish our labouring class of people in manufacturing towns were at this period as comfortable'. He then modified his earlier account of slaves in Portuguese hands by his conclusion:

Slavery in this Colony [Demarara] seems to be quite the reverse of that in the Brazils as in the latter tyranny and cruelty are the leading passion in conducting the slaves, but it must be considered that they have a decided advantage over the British Colonies by being allowed the importation of slaves and consequently they are there of less value than here.

In Maranham if slaves deserted and were recaptured they were punished by flogging. Floggings were administered by a negro with a 'cat' of small strips of hide which soon brought the blood and frequently cut out the flesh. After punishment the slaves were sent into hospital until their wounds healed. For petty offences or theft they were beaten on the hand with a heavy piece of wood having a flat circular end and several holes and notches cut in it. Captain Pinder when walking in Maranham came upon the scene of the punishment of two males and one female. He remarked that the woman was flogged over the shoulders with the 'cat' used for the men. She had on a sort of bedgown and he 'was afraid that their brutal treatment would lead them so far as to strip her naked'.

Portuguese slaves were not always employed directly by their owners but were left to find work for themselves about the town. In such cases the slave kept himself and paid to his master an average of one-third of his daily earnings. Some owners hired-out their negroes for a monthly sum, those let out as mechanics being very profitable. Many of the wage-earners were able, in a few years, to buy their freedom. Black Joe, who stowed

British vessels, was an example of these. He bought freedom for himself, his father, mother, brother and two sisters, then gradually acquired slaves for himself to the value of £1000 and built up a successful business as a stevedore. Black Joe's industry, however, was exceptional; most of the freed slaves were indolent and drunken, working only when penniless and spending their money on women and liquor. Ex-slaves who became owners often treated their slaves with great harshness. Captain Pinder tells of finding Black Joe beating a slave and, on being remonstrated with for his severity, he retorted, 'De dam black Rascal drink de monies, no give me

noting'.

What conclusions are to be drawn from the foregoing illustrations of the Slave Trade and slavery? First, that, although the Slave Trade generally was exceedingly lucrative and the large firms usually lessened the risk of loss by 'sharing' voyages, for a small man like Robert Bostock, who had to carry the entire responsibility himself, there was much uncertainty connected with the business. Bostock was always harassed and there were times when he 'could sleep neither night nor day' for worry. Secondly, the life of a man serving aboard a slaver was hard and liable to be short. The months spent hanging around the Guinea Coast were ruinous to health, although all known preventatives were used against fevers. It is not altogether surprising that the seamen 'embezzled' rum and brandy when they found an opportunity. Thirdly, it seems clear that the negroes were not ill-used on the Middle Passage. Slave ships were not floating charnel houses. It is worth noting that the Fortune lost only two out of 343 slaves and this figure does not appear to have been unusually low. The Ranger had about 200 slaves on board, of which one man died of pleurisy at Jamaica. Robert Bostock was horrified when the Bess lost 64 slaves and hoped it was not through want of care. The Slave Traders, then, if they regarded the 'black men' as so much merchandise, at least kept the merchandise in good condition. Fourthly, as regards the treatment of slaves, Captain Pinder's notes were made after Abolition, which naturally enhanced the value of slaves in the West Indies, but this scarcity value did not apply to the 'Brazils' and the inference is that although there were some very bad masters the majority were not tyrannous. If Mr McDonnell's eulogy is to be credited, the state of slavery in Demarara must have been idyllic. The negroes were housed, fed and clothed; they were given gardens and could sell their surplus produce for their own benefit; they worked a twelve-hour day and a six-day week; and when they fell sick they were tended in hospital. Also it must be remembered that slavery was not necessarily for life. By paying his purchase price a slave could demand his freedom and could not be refused. It will be remembered, too, that the greater part of the slaves did not want freedom,

and most of those who were liberated quickly degenerated into drunken idlers. It may be argued, therefore, that slavery was not entirely a bad thing. Yet however light the yoke, slavery was still slavery, a throw-back to barbarism that no civilized country could support. By the Abolition of the Slave Trade the British people proclaimed their belief that the absolute possession of one man by another was intolerable and an offence against the integrity of the human spirit.

Appendix (a)

List of Owners of the ship Enterprise for a privateering cruise

Thomas Earle	3/16ths	£106	13	3
Edgar Corrie	2/16 ,,	71	2	$1\frac{3}{4}$
Francis Ingram	29 29	71	2	$1\frac{3}{4}$
Wm. Earle & Sons	22 22	71	2	$1\frac{3}{4}$
Dillon & Leyland	22 22	71	2	134 134 034 034
Peter Freeland	1/16th	35	II	$0\frac{3}{4}$
Thomas Eagles	79 99	. 35	ΙI	$0\frac{3}{4}$
Edward Chaffers	22 22	35	ΙI	03
James Carruthers	29 99	35	II	$0\frac{3}{4}$
William Denison	22 22	35	ΙI	$0\frac{\tilde{3}}{4}$
		£568	17	2
Ship's Disbursements		£469 8	8	
Expenses French Prison	ners	99 8	6	
		£568 17	2	

Prize Money. Enterprise, Articles of Agreement 1796. (Extract)

One-quarter of the Neat Sales of all Prizes shall be divided among the officers and crew in the following shares:

Captain	16 shares	Boatswain	3 shares
Chief Mate	8 ,,	Gunner	3 "
2nd "	6 "	Seaman	1 share
3rd "	4 "	Half-seaman	$\frac{3}{4}$,,
4th "	_ "	Landsman	$\frac{1}{2}$,,
Carpenter	5 "	Apprentices having	
Surgeon	6 "	served 3 years	-
Cooper	3 "	Apprentices having	
		served above 1 year	
		Apprentices having	
		served under 1 year	_

Appendix (a) (cont.)

List of articles included in an auction of Prize goods at Garraway's coffee house, Liverpool, by Ewart & Rutson, brokers.

1 piece blue Broads painted	£2	6	3
3 pieces " Baize	3	10	6
2 remnants ,,	2 .	0	0
2 ,, flowered with tiffany	5	18	0
12 pieces red printed calico (damaged)	I	19	0
19 ,, blue ,, ,,		19	0
5 sattin cuttanees	II	3	9
132 cutlasses in scabbards	7	14	0
100 musketts @ 12/6d	62	10	0
100 ,, <u>@</u> 12/3d	61	5	0
14 cat skins		II	5
6 doz. trade forks and 1 doz. and 8 spoons		4	0
31 elephants teeth	14	18	10
25 ,, ,,	6	0	6
2 stumps		13	7

Also sold: brandy, red alligars, printed handkfs., Guinea knives (1 doz.), gunpowder, looking glasses, white clapper bells, byrampauts, byutapauts, neganipauts.

Appendix (b)

Account of the ship Lottery (summary):

By sale of 452 slaves Less Charges	£41,793 13 6,600 15	4		
		35,192	17	10
Less	Disbursements—	1,785	I 2	0
Carr	ried down to new	account—£33,407	5	10

Note. 'Charges' on slaves included duty, surgeon's head money, Company's Commission @ 5%, and feeding, medical attention, attendance, store rent, etc. of slaves while unsold.

Appendix (c)

Ship Fortune a/c of sale of 240 slaves (summary):

	£	5.	d.		<i>f</i>	s.	d.
Dr Muir, his 2 average slaves	192	0	0	By neat sales of 240	~		
Captain Bridson average	192	0	0	slaves being part of			
Ship's Disbursements	3053	18	0	the ship Fortune's			
Amount of Invoice	4541	19	6	cargo	22633	4	6
Sundry a/cs	9143	18	9	•		т	
Balance carried to new a/c	5509	8	3				
	£22633	4	6		£22633	4	6
						_	

Appendix (d)

Wage List of the ship Fortune, Thomas Leyland & Co.

Stations	Wages per Month	Stations	Wages per Month
Master	£5 0 0	18 Seamen	@ £6 0 0
Surgeon	6 6 0	3 3 2	(a) 5 10 0
1st Mate	5 0 0	3 ½ " 5 ¼ " 1 ¼ " 3 ¼ " 1 ½ ",	@ 5 5 0
2nd ,,	7 7 0	I 3/4 ,,	@ 5 10 0
3rd ,,	6 0 0	3 4 ,,	@ 5 0 0
4th ,,	6 0 0	I ½ ,,	@ 4 15 0
Trading Mate	6 0 0	5 ½ » 3 ½ »	@ 4 10 0
Carpenter	9 0 0		@ 4 0 0
Carpenter's Mate	4 10 0	2 Landsmen	@ 3 10 0
Cooper	8 8 0	I ,,,	@ 3 3 0
Gunner	6 10 0	4 ,,	@ 3 0 0
Steward	600	5 , 35	@ 0 0 0
Boatswain	7 0 0		

Total monthly wages £323 4 0 Total advances paid £999 12 0

AUTHORITIES

Published Works

A Circumstantial Account of the True Causes of the Liverpool African Slave Trade by an Eye Witness. Liverpool, 1797.

History of Liverpool. Thomas Troughton.

Liverpool and Slavery: an Historical Account of the Liverpool African Slave Trade by a Genuine 'Dicky Sam'. Liverpool, 1884.

Life of Captain Crow. Crow.

Liverpool a Few Years Since by an Old Stager. J. Aspinall.

Recollections of Old Liverpool by a Nonegarian. [James Stonehouse?]

Manuscripts

Anchorage Book October 1795-July 1796.

Thomas Leyland and Co. Letters and Accounts.

Journals of Liverpool Slave Ships.

Letters of Robert Bostock.

Articles of Agreement of the ship Enterprise, 1796.

Log of the brig Ranger.

A Diary and Abstract of a Journal on a Voyage from Liverpool to Maranham and Demarara and back to London in the ship *Crown*, Joseph Pinder, Master, Commencing May 12th 1826 and ending 19th October 1826.

SHIP-MODELS IN DANISH CHURCHES

By Henning Henningsen

In Roman Catholic churches near the sea it is very common to see ship-models hanging under the vaults or standing in glass-cases, the so-called 'ex-voto' ships. They are given by sailors who have been rescued from peril on sea as votive offerings, because they promised them to God or a saint, if they were saved, or as a token of gratitude after a long and dangerous journey.

In Protestant countries such ship-models are more rare. In fact there exist only a small number in English, Dutch and German churches. In Norway there may be about 100 ship-models, and in Sweden a little more

than 200.

Only in Denmark the custom of offering ship-models to churches seems fully alive. Perhaps it may interest foreign readers to learn a few facts about

the tradition in a country that has been Protestant since 1536.1

In Denmark there are about 2200 churches. An investigation has shown that there exist about 820 ship-models in Danish churches; besides there are known to have been about sixty or seventy models that have disappeared, but of course far more have been destroyed throughout the ages. About every third church possesses a ship-model. In some sixty churches there are two, three, or four models, and in a few others there are even more. In Sønderho on the island of Fanø there are as many as ten ships.

As a rule the models are placed under the ceiling, suspended from iron bars or steel wires, with the sprit pointing to the altar. Some of them, however, are placed on window-sills, on beams or elsewhere, and having stands.

The models generally represent sailing ships. The older ones are war-ships with three masts, the later ones are merchant ships, frigates, barques, clipperships or similar types. Then there are smaller vessels, such as brigs, schooners and sloops. We also find specimens of the well-known Danish one-mast ship the 'jagt', of fishing-boats, and of special craft such as pilot-boats, customs boats, and lightships. Only a few steamers can be found, and they are mostly ships with masts and sails, such as Greenland ships (belonging to the Royal Greenland Commerce Company) and naval steam-frigates (many of them representing the frigate Jylland, famous in the battle of Helgoland 1864). The models often represent real ships and bear their

I Further details may be obtained in my book Kirkeskibe og kirkeskibsfester (Søhistoriske skrifter III, published 1950, by the Handels-og Søfartsmuseum at Kronborg, Elsinore).

original names, so that one may find heathen names such as Neptune, Venus, Mermaid in Christian churches. But often they have special Christian names such as Holy Trinity, St Nikolaj, Hope, etc.; or they may bear the name of the donor.

The length of the hull varies from 19 to 335 cm., but 50% are between 1 and 2 m. long. The quality of the models varies very much. Some are masterpieces, accurately built with all their small details; others are 'blockmodels', whose hull is carved out of a block, and the details are rather neglected or definitely incorrect. It may be noticed that many of the older ships are built 'optically', that is to say that the hull is too low and the rigging too high, the guns too long and the flag too large; but when the models are seen from the floor of the church they look far better than exact models would, because the bottom of the hull would seem too predominant.

The material is wood; in some models the finest sorts are used, in others only plain wood. In old types the figureheads and stern ornaments are finely carved. For several details bone is occasionally used. Many models are gilded and painted in beautiful colours. Some ships are shown with all sails set. Most of the models have an abundance of the 'dannebrog', the Danish flag. On some of the ships small dolls, representing the crew, are placed.

Until about 1900 the ships were used as chandeliers in a few churches. During the Christmas service, at sailors' weddings and on other occasions the candles were lit. Some models still carry small electrical bulbs that can be lit.

Like real ships the church-ships are furnished with documents. They are usually placed in the hold or in the cabin, lying in a small bottle or in a little metal box. On the papers are written the names of the shipbuilder and the donor, the date and the reason why the ship has been given to the church. Sometimes it is also stated when and by whom the ship has been repaired. Now and then the models are taken down to be restored, if not already too dilapidated. On such occasions many old models may have vanished. When old ships are repaired, the rigging is in most cases renewed, but unfortunately the restorers who are common sailors, are seldom able to give them the original rig back, so that there is no conformity between the hull and the upper parts of the model. On the outside of the bottom there are often inscriptions, such as the names of the givers, sentences and quotations from the bible, and so on.

More than two-thirds of the models are built by sailors, either young ones on board ships on long voyages, or old sailors with lots of time to spare. They often build models of ships in which they have sailed in their youth. In modern times there are many models of training-ships, because there are

very few real sailing ships left. Several ships are built by a syndicate of sailors or fishermen, each member of which has done his little part of the work. Moreover, we find people of the most different social standards among the builders, for example peasants, labourers, parsons, officials, prisoners, noblemen, etc. Some model-builders have built more than ten ships for different churches.

About three-fourths of all models have been presented by single persons as a gift to the churches. Many of the builders have given their ships to their churches themselves. Among the donors we find all sorts of people, poor people and rich people, school-boys and prisoners, Danish immigrants in foreign countries, kings, etc. One-fourth of the models are gifts from sailors' guilds or corporations, from different societies, from firms and schools, and also often from the congregation which in a community has collected the money for buying the ship.

In most churches the models are simply hung up without reference to anybody except the parson, but in other cases the authorities who take care of the archaeology and the objects of art in the churches have been consulted, so that a bad-looking model has been refused now and then.

One may think that the custom of offering ship-models to churches must go back to Roman Catholic times, and it may of course be so. But in fact we know nothing at all about church-ships in Danish churches before as late as 1589, when the bishop of Odense noticed a model in one of the more than 200 churches in his episcopate, the island of Funen (Fyn), where to-day we possess about 150 models. The ship that he mentions no longer exists. The oldest Danish model that remains is a ship, dated 1632, in the church of St Morten in Randers. This is a rather early model compared with similar ships in other countries. In Norway and Sweden a couple of models older than 1600 are preserved. From the seventeenth century only about fifteen Danish church-ships are known, and from the eighteenth century there are approximately 110 models. But in modern times the number has increased to a high degree, as the following list will show:

Older than 1700	1.6% of all models
Eighteenth century	15.1% of all models
Nineteenth century	25.1% of all models
1900-50	57.5% of all models.

It is most curious to see how a custom like this arises. Before 1850 it was not very common to present churches with ship-models, and after 1850 there is a decreasing impulse to make such gifts, but after 1900 it is rather amazing to observe how common it has become. Nowadays about ten new models on an average are given to Danish churches yearly. It is simply that

there is a general feeling among the people that a ship-model has its place in a church as a permanent piece of decoration, such as chandeliers, epitaphs, paintings, and so on. With few exceptions the models dated before 1850 are hanging in churches near the sea, both in town and village, but since the new custom started, churches inland also have been ornamented with ship-models. This specially applies to the middle of Jutland (Jylland) where there was not a single model before 1850, but now almost every church possesses such a one. If this custom continues to grow, all churches before long will be able to show one or several ship-models.

This fact is really amazing. In no other country, Protestant or Roman Catholic, can the same be observed. The custom is dead in most countries,

but in Denmark it is more alive than ever before.

If we examine the reasons for giving the models to the churches, we are

able to point out the following motives:

First, a very small number of church-ships are really vows or votive gifts (therefore the expression 'ex-voto' ship must be avoided in connexion with models in Protestant churches). In fact, only four of our models can be claimed as presented by grateful sailors from what their papers or inscriptions testify themselves; but local tradition furthermore ascribes eight models as votive-gifts, a total sum of twelve models, which is only $1\frac{1}{2}\%$ of all known models. Some warships commemorate real ships in which the donor served in wartime, and they may be claimed as vows of sorts, but still the number is extraordinarily small. The Danish Protestant church has never prohibited people from offering votive-gifts to their churches, and in fact a rather amazing lot of different objects in churches are known or said to be real vows.

Secondly, many models have been given in memory of people, living or dead, either friends or members of the family. Several have been given by parents in remembrance of drowned sons. As the five-masted barque København, then used as a training-ship, disappeared totally in December 1928 with all her pupils, a rather large number of models of this ship was given to churches.

Thirdly, some models were given to commemorate a special occasion of quite a different sort. Some were given at a church jubilee or a church restoration, others as a token of gratitude because of peace after war; since 1945 at least six ships were hung up with names such as Pax, Peace, Freedom of Denmark, etc. Also royal birthdays, or the king's visit to the village have given occasion for a gift. It was the same with the fall of the free constitution of 1849, and the reunion of North-Slesvig with Denmark in

¹ See my treatise on 'Sømænds votivgaver til danske kirker' in the yearbook of the Handels-og Søfartsmuseum at Kronborg, 1950.

1919. Other ships are family gifts, given at weddings, baptisms, confirma-

tions, birthdays and jubilees.

Fourthly, a few models tell us that they simply have been presented in order to adorn the churches, precisely like epitaphs of the sixteenth and seventeenth centuries which have been given 'as an honour to God, as an ornament for the church, and as a remembrance of the giver', as their inscriptions run.

Fifthly, a far larger number of the models are professional gifts. The rich merchants were able to give silver cups and brass chandeliers to the churches but the sailors or fishermen were poor. Therefore their guild often built a shipmodel that was cheap and also typical of their profession and even beautiful, and offered it to their church. Especially in towns where many sailors lived we often find several models, of which the sailors of course were very proud.

Sixthly, the reason why the custom nowadays is so remarkably alive is, however, mainly that the church-ships are meant to be symbolical gifts. A church is simply not complete without a ship, because the ship is an object with Christian signification. As early as the first century the church was compared with St Peter's ship, and architecturally we still speak of the 'nave' of the church-building. The idea of the ark of Noah may also have contributed hereto. But when we ask what the ship-model exactly symbolizes, no one is able to give a precise answer. It may mean (a) the church itself, (b) the Christian faith, (c) the hope of reaching Heaven, the safe harbour, (d) life itself as a journey, (e) a Christian's manner of living, being like a pilgrim's progress, (f) God's community on a dangerous journey, (g) the narrow way of Christian religion, (h) navigation itself, standing under God's protection; and perhaps still more different meanings.

When a new model is received, the parson generally preaches about the symbolism of the ship. He compares the hull with the human body, beautiful but fragile; the wonderful rigging is like the motives for our actions, which we must control, just as the sailors easily know each rope; the cargo is the intentions of our hearts; the sails are our invisible forces, and the wind that fills them is our free will; the rudder is our intelligence; the compass is the Christian doctrine, and the anchor symbolizes faith.

Local traditions occasionally deal with church-ships. It was, for instance, told that whoever dared to take away the model of a 'jagt' in the church of Marstal would die soon afterwards. In earlier days as the models were hung by ropes and not by iron-bars, they were meant to be able to tell the sailors how the wind would be in the next few days, because they swayed in the draught and hung in different positions. Several models are said to be of mysterious origin; according to local legend a frigate in the church of Sønderho was driven on shore about 1800, with a cargo of the finest tea;

another model was found sailing alone on the wide ocean by sailors and given to their church in Marstal.

Strangely enough there is no fixed ceremony prescribed to be used by the clergy when a ship is to be introduced into a church. In the hymn-book there are a few hymns suitable for the occasion, and the parson, as already mentioned, usually preaches a sermon in which he points out the symbolical meaning that may be used in connexion with the gift, and of course he will speak some words of thanks to the donors on behalf of the church.

A new tradition seems, however, to have begun. In some thirty-five places, both in towns and villages, the ship-models are brought to the church in big processions, not only when new ships are given, but also when the old ones have been repaired. It is mainly the sailors' and fishermen's guilds that arrange such 'kirkeskibsprocessioner' or 'skibsfester' (ship-festivals). The processions usually start from the harbour. There are many flags and a band plays. The sailors are rigged in their gala dresses: white shirts with blue collars, a red sash round the waist, black trousers and black hats with ribbons. Four or six sailors carry the model on a 'stool' between them, and the participators walk behind the procession in ordinary dress. All flags are hoisted in the town. The leader is a 'pilot' who gives his orders as the procession proceeds through all the narrow streets of the small town. Now and then small guns or rifles salute the procession. At the church the parson, standing at the gate, welcomes the procession which then proceeds into the church to the place where the model is to be hoisted up. The 'pilot' hands over the ship to the parson, and he promises to take care of it in the name of the church.

In some places there are two or occasionally, as in Hornbæk, four models carried to the church at the same time. Ships are taken down for repairs within certain intervals, such as eight, ten or twenty-five years, and brought back in procession. This follows a fixed procedure. Elsewhere the processions are held at more irregular intervals.

In the town of Stege the man-of-war Justitia, which was presented to the church in 1718, is restored in this way every ten years, and has been brought back in a procession since 1728, according to local tradition. From 1780 and 1788 processions in Århus and Korsør are known, but in the nineteenth and twentieth centuries they became rather common.

It seems that this custom is a genuine Danish one. In fact I only know of one similar procession in a foreign country; at Portsmouth a model of the man-of-war Mary Rose was given to the cathedral church of St Thomas in 1930 and carried in a procession to the church. This English procession seems to have been rather like the Danish ones, but there can scarcely be

any connexion between them. The Roman Catholic processions with ship-models, for instance, the French 'pardons', are of quite another kind; they are held each year on certain dates in order to bless the ships and the fishing-boats, or to consecrate the waters; that is quite unknown in the Protestant Danish church. Statues of saints are often placed in ship-models in Roman Catholic processions; the clergy participate, and the sailors carry wax-chandeliers and church flags. These processions are related to that other Roman Catholic religious festival of blessing the fields, and so on. In Denmark the 'kirkeskibsprocessioner' are more professional than religious. They have only one point in common with Roman Catholic 'pardons', the carrying of the church-ship.

It will be rather interesting to see how the processional tradition will develop in Denmark. Probably they will be still more common than they are now. As mentioned above, the custom of presenting ship-models to churches is very active. Up till now modern steam and motor-ships have not been thought seemly as church ship-models. In other countries such new types can be found, for instance, the model of the *Mauretania* in Winchester cathedral in England. It seems likely that in future years similar modern ships will be thought just as appropriate as sailing-ship models in

Danish churches.

OLD NAVAL GUN-CARRIAGES

By J. D. Moody

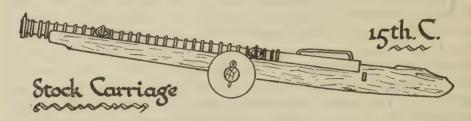
SUCH is the contrast between the rapid changes in naval ordnance in the latter half of the nineteenth century and the previous slow development, that three hundred years are apt to be dismissed with two words: little change. Just as Drake would have found little about the Victory that would have required much explanation, so would his gunner soon have felt at home with her armament. Nevertheless, both would have noted with approval considerable improvements since their day, which for us are overshadowed by the progress of the last hundred years. Here then is an attempt to trace the stages in the growth of naval gun mountings between the sixteenth and nineteenth centuries, and in particular that of the 'common ship carriage'.

Naturally, information about the earlier periods is extremely scanty, and reconstructions have to be based on widely scattered evidence. We proceed from reasoned guesswork at the beginning to the certainty of official drawings at the end. If over much reliance has been placed on foreign examples, the excuse must be that foreign influences were proportionately large. Material was bought abroad, even after industry might be thought to have been well established here. Foreign craftsmen were promoted to important positions in the manufacture of armaments, nor did our own craftsmen fail to make similar progress abroad. Early text-books usually had a foreign basis, either as direct translations or as more skilful adaptations. Illustrations were regularly borrowed from other works, often retaining their original foreign captions. Much in fact was international in the field of armament, and only slowly can we detect definite national characteristics.

When guns of any size were first mounted on shipboard it was natural that they should have the same mountings as those already in use ashore, even the timber scaffolds of the early bombards. Only slowly were these mountings adapted to the peculiar circumstances encountered at sea. The guns salvaged from the *Mary Rose* show a transitional stage in armament in the mid-sixteenth century, and similarly contemporary lists reveal even more variation in the mountings. Some had two wheels, some four and some none at all. Sometimes the wheels or trucks were shod with iron, whilst others were of plain wood.

Four main types of carriage may be distinguished. The first was the 'stock' mounting used for the older wrought-iron breech loaders. The

'hall' of the gun was sunk into a solid wooden beam which had a shoulder at the rear end against which the 'chamber' was wedged into position. Some, as those recovered from the sea at Anholt prove, had axles and a pair of wooden trucks. Others, like those from the Mary Rose, had no trucks, but were grooved on the underside, as if to slide along a guide fixed to the deck. I have been able to find no certain evidence for trucks on the three carriages that I have examined, but there may be on some of the others.

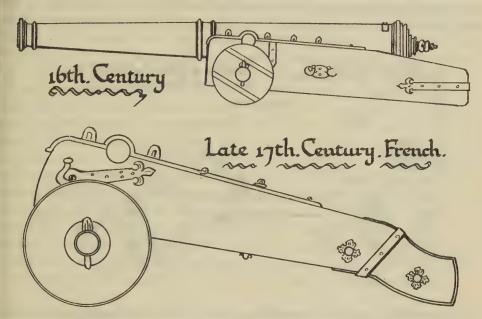


Incidentally, it is strange that no carriages seem to have been preserved belonging to the bronze guns of the same vessel. Neither mounting had any fittings for the attachment of breechings or tackles, unless the lifting rings of the guns served that purpose, nor was there any apparent means of elevation.

The 'trunk' mounting came into use with the cast, muzzle-loading gun. Two stout planks were connected by transoms, and the gun was slung between them. It was fastened by cap-squares over its trunnions, and therefore the breech needed no shoulder to butt against, but merely rested on the rear transom. Hooks, of the kind used on land mountings for the attachment of drag ropes, were fixed to the sides of the planks. Trunnions were at first primarily used for fastening the gun to its mounting, and not necessarily for elevation; some early guns even have two pairs, and square ones at that. These trunk mountings were used for the bow guns of galleys and recoiled along guides on the deck. They were pointed by the helm and owing to the galley beak, depression, at any rate, was not desirable. Both this carriage, and the two following are illustrated in Pietro Sardi's Artiglieria of 1621, and the relevant plate is reproduced in W. L. Rodgers's Naval Warfare under Oars.

The two-wheeled carriage developed simply from the trunk mounting. The forward transom was extended through the side planks or 'brackets' to form the axle for the wooden trucks, while a wedge or quoin between the gun breech and the rear transom provided for control of elevation. Some features, including the location of the axletree, the hook fittings, and the reinforcing strap behind the trunnions, can be paralleled in the contemporary field carriage. On this sort of carriage, broadside guns could be

transferred from one part of the deck to another as occasion demanded. Similar carriages, modifications of field carriages to naval use by shortening the trail and using low trucks in place of wheels are to be seen later in history. Some, either for use on shipboard or for coast defence, are illustrated in the



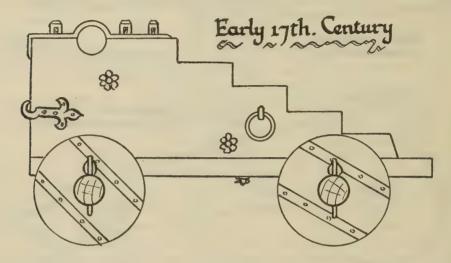
late seventeenth-century *Mémoires* of St Remy. The French 'affût à crosse Romme' of the 1840's was a similar adaptation of the land-service block-

trail carriage.

The last type, the four-truck carriage, survived with small modifications to the end of the seventeenth century. It was probably in use by the second half of the sixteenth century, although the indications are obscure. There have been those who would trace the origin of the ship carriage to its military brother, the garrison standing carriage. It is noticeable in early pictures of fortifications that guns were commonly mounted on the two-wheeled field or siege carriage, even in such unlikely positions as the tops of towers. It is interesting, therefore, to find a picture of a four-wheeled truck carriage ashore in John Smith's Generall Historie of Virginia...&c. 1624. There are only two, the remaining two dozen guns being on field mountings. The inference seems to be that ship carriages brought ashore gave rise to the garrison carriages.

At first glance these four-truck 'table' carriages would appear to be little different from the ship carriages, even of the nineteenth century, but their construction was radically different. Above the two axletrees was fixed a

flat platform like a table top. The brackets were attached to this 'table' and connected by a front or breast transom, retained by a transverse bolt. In the upper surface of the brackets steps were cut, as in later carriages, to allow for the use of handspikes in varying the elevation of the gun. When horizontal the breech was well above the table, so that a bed had to be provided for the elevating quoin to rest upon. This might take the form of



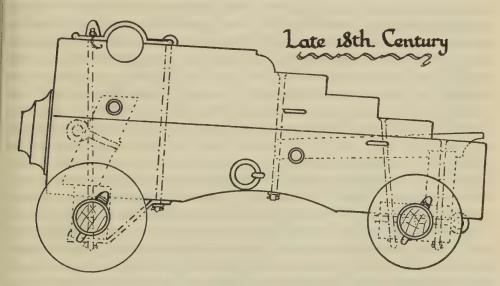
a solid wooden 'cushion' or an oblong stool. In the nineteenth century the French retained the wooden cushion, resting upon a narrow and vestigial table. British and American carriages, on the other hand, used the 'stoolbed'. This, having lost one of its legs, rested the other on the rear axletree, while the front end was supported by one of the two iron cross bolts of the carriage, the bed bolt.

The trucks of these early carriages were of one piece of wood, cross-braced with iron straps, and fore and hind were of the same size. A new feature was the attachment of ring bolts to the centre of the brackets, suggesting the use of breechings as in later days, but the old style 'advance hooks' were retained at the front. Similar types of carriage are to be seen in the works of St Remy and St Julien, even in eighteenth-century editions. An actual example was recovered from the wreck of the frigate *Enigheden* 1679, and with its iron-work restored is shown in the guide to the Royal Danish Arsenal Museum. It has a curious feature in holes, for the breeching to pass through the carriage, just behind the breast transom, instead of round the breech of the gun, a practice begun in this country nearly two hundred years later. Some small, undated, specimens of this kind of carriage used to be displayed outside the Queen's House at Greenwich.

A variant type in use in this country had small semicircular skids in place of the rear trucks, as may be seen in Dummer's section of a 1st-rate (circa 1680). There are in the Tower some model guns of Charles I's time, on chountings of this sort. The carriages are apparently replacements after the sire of 1841, but appear to have followed the pattern of the originals.

These seventeenth-century 'table' carriages had obvious faults. Water would lodge between the brackets and the table and set up rot. They had, moreover, but poor provision for the attachment of tackles. Those shown by St Remy, for example, have only rope loops at the end of the table and the old land service advance hooks. If illustrations are to be trusted, the elength of the carriage did not always fit the gun very well, and a considerable overhang of the breech was not uncommon, in spite of the fact that definite rlengths for each size of gun are mentioned as early as the sixteenth century.

It is the more surprising, therefore, that carriages of the eighteenth century, as shown in Muller's Treatise of Artillery have many more refinements. There is a gap in information between these, the true 'common ship carriages', and their predecessors, only partly to be filled by a plate of a ship carriage (woodwork only) in the work of Michael Mieth (circa 1684). This shows a bracket carriage without elevating steps or table, but with the double bed transom of land carriages. It also bears some resemblance to contemporary mortar beds, like that of William III in the Tower.



The big change was that the brackets were fixed directly to the axletrees by bolts passing through their thickness, and the troublesome table disappeared, leaving no lodgment for damp. The carriage recovered from

the Royal George, the remains of which are in the Victory Museum at Portsmouth, agrees almost exactly with those described by Muller, allowing for the difficulty of checking measurements on water-worn timber. Similar carriages are also illustrated in Falconer. The whole carriage was proportioned to the gun, taking as factors the calibre and the length of the gun from breech ring to trunnions. The stoolbed has already been described. The axletrees were of the same length, but the fore-trucks were normally a little larger in diameter than the hind. They appear to have been made of one piece of wood. No mention occurs of ironwork for them in otherwise exhaustive lists, and they are still so described in R. Simmons's Sea Gunner's Vademecum, 1812. The brackets were mounted vertically and were lightened by an arch cut out of the bottom edge. Hinged cap-squares had appeared on the later table carriages and were retained, the other end of their bolts serving to fasten the fore axletree by means of washers and 'forelocks' or wedges of iron passing through a mortice in the bolt. In contrast, the cross-bolts, bed and breast, were riveted over 'burrs'. Two ring bolts for the breeching were fixed above the arch, and in addition six 'loops' for the attachment of tackles. There were two on each side for the outhauls, the upper pair being used in housing or securing the gun, so as not to obstruct the fitting of a second 'preventer' breeching. One, usually in the breast transom, but sometimes in the fore axletree, was to use in transporting the carriage about the decks. That in the rear axletree was for the train tackle which held the gun inboard while it was loaded. In the late eighteenth century 'horns' were added to the front edge of the brackets, to butt against the port sill when the gun was run out. The first I have seen are those on the Royal George carriage, where they are nailed on. Later they appear as an integral part of the lower planks of the brackets. (These were made of two planks dowelled and bolted together.) They are referred to in 1810 as showing that a certain carriage was old fashioned, but engravers continued to show them until the 1830's, though often in side elevation and not in plan view. They had something to do with the amount of tumble-home of the ship's side and the necessity for keeping the fore-trucks clear of the waterways, but it seems that they were eventually replaced by a curved chock attached to the port sill, suggested in 1809 and in general use in 1827. A similar, but obscure, fitting was the buffer. This was a curved block of

A similar, but obscure, fitting was the buffer. This was a curved block of wood bolted to the breast transom like a shelf, and protruding some inches in front of the brackets, at the same height as the port sill. It was a common feature of French and American carriages in the nineteenth century, but apart from two models, of about 1840 and 1860 respectively, I have not been able to trace its use in the British service. Some confusion may have arisen because some American ships had a few British pattern guns aboard,

Ind these have been illustrated. It may have been assumed that the carriages were also of British pattern, whereas carriage design was such that it could

eadily be adapted to any gun by varying the dimensions.

Illustrations of the early nineteenth-century carriages are not always as a ccurate as might be desired. The carriage was by this time over familiar, and under a heavy fire of criticism by inventors. Pictures intended to show the fitting of some suggested device or modification, or the run of tackles and breeching, are not scrupulously accurate in other details less immediate to their main purpose. Lists of dimensions often repeat unemended data from the mid-eighteenth century. By the time we come to really reliable drawings, those prepared in the Royal Carriage Department between 1860 and 1865, we are already nearly at the end of our story. The danger is that two may fall into the error of the too-knowing re-rigger of models, and rattribute the perfection of the well-known to a somewhat earlier period.

It must suffice, then, to record rather vaguely the minor changes that

took place in the nineteenth century.

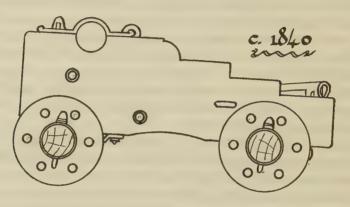
Yet another obscure addition was the use of side cleats. These were triangular pieces of wood nailed to the outer sides of the brackets, just in front of the breast bolt. They were the usual calibre in width and occupied about two-thirds of the depth of the bracket, with the narrow sloping edge on top. I have not been able to trace their use, as there seems to have been no need to reinforce the carriage at this point, but they lasted from the turn of the century till about 1830. About the same time the fore axletree was shortened, so that the fore-trucks were closer together than the hind, and this change persisted with all later carriages. Tackle loops were placed vertically on the last step of the brackets, being the upper end of the rearmost hind-axletree bolts. Later these 'endloops' replaced the older sideloops, but on models of about 1827 both kinds are to be seen in use together. They probably indicate a greater use of tackles in the training of the gun.

The run of the breeching was changed between 1830 and 1834, and no longer passed through the ringbolts which were therefore omitted from later carriages. In the older system the breeching passed from the cascabel down through the carriage ringbolts, and thence to the ringbolts at the port sides. This caused a reaction on recoil that tended to lift the fore-trucks from the deck, and led to frequent criticism. No change was made, however, until guns of Blomefield's pattern, with their cast breeching loops at the cascabel, had replaced the older styles which relied on a strapped-on

thimble to hold the breeching to the gun.

Trucks, which had been of one piece of wood, were made in two layers with the grain at right angles, and fastened together by a series of small

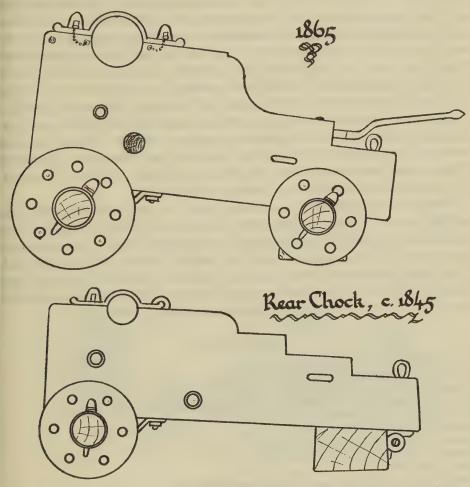
bolts, probably by the 1840's. Fore-trucks were still usually of larger diameter than the hind, but on at least one carriage, that for the short 32-pr. 25 cwt, were equal. Fighting blocks were added later, a single long block under the fore-, and one under each end of the hind-axletree, all reaching to just above deck level. Should a truck come adrift in action the carriage would not overturn, though friction would be increased. In fact, the rear trucks were often removed in fighting the weather guns to reduce recoil on the sloping deck, being replaced on run out.



The coming of the Armstrong breech-loaders rendered it impossible to fasten the breeching to the gun in the normal way, so a system that had already seen some use in the seventeenth century was adopted. Holes were made in the carriage sides, just behind the breast transom, and the breeching passed through them. By 1866 this was done with all mountings, even where the gun was a muzzle-loader with a breeching hole in the button. Cap-squares on carriages after 1862 were no longer hinged, but fastened to both bolts in the same manner by 'forelocks'. About the same time a bolt, like a door bolt, was fixed to the end of the stoolbed on the underside to fasten it to the bed bolt. A simple self-acting brake was fitted, just a pair of wedges suspended behind the fore-trucks, on which they skidded on recoil.

The use of screw elevation, long common on field carriages, was first used at sea for carronades and the short guns that were based on those weapons. It spread to all guns in the 1850's and 1860's, being at first placed under the stoolbed with the normal quoin in use as well, but later both these parts were dispensed with. A ratchet lever gave sufficient power to the layer to elevate the gun unassisted, and once handspikes were no longer needed to raise the breech the use of steps on the brackets was abandoned. It will be noticed, too, that the bottom of the brackets was no longer cut away in an arch.

There was a reversion to two-wheeled carriages, particularly for the shell runs and some of the shorter shot guns that were liable to excessive recoil. The unimpeded recoil of a 32-pr. on a common ship carriage, with full charge and on a level surface was some 11 ft.) The rear chock carriage was



essentially the same as the common carriage, except that the rear trucks were replaced by a large block of wood, fastened in the same way as the rear axletree.

The period from 1810 to 1850 was one in which many experiments were made in the hope of curing the defects of the common carriage, or of providing an alternative mounting. Models of these experiments are to be seen in the Rotunda and National Maritime Museums. Unfortunately, it

is not always possible to trace their precise date, or to find out whether they saw much service. Congreve and Marshall both published books on their inventions, and while their claims must be taken with reserve, there is evidence that they were successful to some extent, Congreve's mountings; being used in the East India Company's service, and Marshall's in the Royal Navy. Congreve's were essentially slide carriages, the gun recoiling on ratchet trucks mounted on its trunnions, while Marshall's carriage consisted of the rear half only of a common carriage, the fore part of the gur being supported by a pivoted fork. Another variant that apparently saw enough service to be included in MS. gunnery note books of the 1840's. was Millar's adaptation of a land service howitzer carriage to carry his first shell gun. This had its two trucks inside the brackets, and recoiled along a directing bar. Dickson's short 32-pr. was also mounted on a similar carriage. Cast-iron carriages, like the garrison standing carriages still to be seen mounting trophy guns, were tried out in 1810, but were found unsuitable for use at sea; cast-iron was too easily broken by shot, too heavy in action, and too difficult to repair to be a serious rival to wood.

However it originated, the common ship carriage lasted nearly three hundred years. Many criticisms were levelled at it, even in its prime, but it was robust and simple, and probably as reliable and accurate as the guns it supported. As long as guns could be handled by man-power it survived. If we cannot find out as much about its history as we would wish, at least I think there is enough evidence to show that the verdict 'little change since Henry VIII's time' is an over-simplification of the problem.

SOME SOURCES

COCKBURN. MS. Gunnery Notebook. 1840. Congreve, Sir William. Mounting of Naval Ordnance. 1811. Congreve, Sir William. Medium 24-pr. 1820. Douglas, SIR Howard. Naval Gunnery. 1855 and other editions. Dupin, Charles. Voyages dans la Grande Bretagne. 1820. FALCONER. Marine Dictionary. 1769 and 1815. GLASCOCK. Naval Officer's Manual. 1836. JEFFERS, W. Naval Gunnery (U.S.A.). 1850. LAFAY, J. Aide Mémoire d'artillerie navale. 1850. List of changes in Ordnance Stores. Early volumes from 1860. LLOYD & HADCOCK. Progress... of Artillery. 1893. Marshall, J. New Method of Mounting Ships' Guns. 1829. MIETH, M. Beschreibung der ganzen artillerie. 1736. (Earlier ed. 1684.) Muller, J. Treatise of Artillery. 1757 and 1768. PRÉAUX. Cannonage à bord. 1837. ROBERTSON. Evolution of Naval Armament. ROYAL CARRIAGE DEPARTMENT. Lithographs 1860-5. St Remy. Mémoires. 1697 and 1745. SARDI, PIETRO. Artiglieria. 1621.

IMMONS, H. O. Ideas on Heavy Ordnance. 1839. IMMONS, R. Sea-gunner's Vademecum. 1812.

J.S. Naval Ordnance Instructions. 1866.

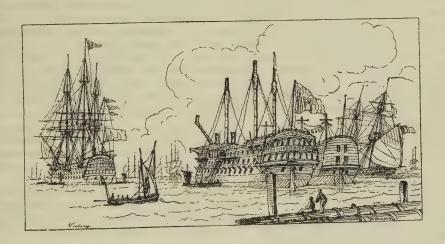
WARD, J. H. Ordnance and Gunnery (U.S.A.). 1845.

Juide to the Royal Danish Arsenal Museum. 1948. (English version.)

hotographs in the Science and National Maritime Museums.

Models and carriages in the National Maritime, Victory and Rotunda Museums, the R.U.S.I. and the Tower Armouries.

This list omits most secondary sources, and those from which comparison with land service arriages and guns have been drawn.



THOMAS FENNER AND THE GUINEA TRADE, 1564

By K. R. Andrews

The document printed below was found among the High Court of Admiralty records in the Public Record Office, in a volume of depositions chiefly relating to trials for piracy. Nothing further is known about this voyage of Thomas Fenner's, and it would be naïve to assume that his story is more than a plausible explanation of how he came into possession of some quantities of Portuguese sugar and brazilwood. Nevertheless much of the circumstantial detail, especially concerning the preparations and the first part of the voyage, is presumably accurate. The deposition therefore adds something to our knowledge of the English Guinea ventures of the 1560's, and in particular shows that the Fenners were interested in trade and plunder on the African coast before the famous voyage of 1566.

Die martis 26 Decembris 1564.

Thomas Fenner of Erneley in the Cownty of Sussex gent. examined towchinge his last beinge at the seas, and his affaires and Doinges there. Seithe that abowte afortnight before Mighelma-last, after that this examinant had providyd and bought the shipp namid the Mynykyn from portesmowthe whereunto she then belongid, and had brought the same unto Ichinor within Chichester havon, one Edge came from Hampton to this examinant bringinge commendacions unto him from Edwarde Cooke of Hampton, and in discourse of communicacion and talke offerid and declarid unto him, that the said Cooke and he with ther ii shippes callid the Edwarde and the John, had determinid to goe unto Guinea abowte traficque, persuadinge with this examinant (because his shipp the mynykyn was an apt and mete vessell for that place) to mynde and ioyne with them in that ther enterprise thethur. Whiche said Edge then and there farder declarid that if this examinant would purpose him selfe on that voyadge, he must helpe to furnishe the said Cooke with the some of L¹¹.

After whose communicacion endyd, this examinant declarid that he would come over and talke with the said Cooke therein, And as for the loone of L¹¹ to be made unto him, this examinant (as he seid) would not stick taccomplishe his desire uppon some consideracion, when they should mete to gestlurs

Uppon this motion this examinant iourneid unto Hampton, and there mett not with the said Cooke at that tyme because of other his letts. But within ii or iii dayes followinge, they mett to geathurs at Havant vii myles distant from Chichester, And they bothe concluded to come and goe to geathurs uppon the forsaid enterprise and voyadge. To whome this examinant lent xl¹¹ in money and one cable to the valewe of x¹¹.

After this, this examinant causid his said Mynykyn to be made redye for that contrey. And providid as many kerseis as made iiii packes to carye with him.

- 1 P.R.O. High Court of Admiralty, Examinations, Oyer et Terminer. 1/36 (1560-5). This deposition was first discovered by Professor J. W. Blake (see his European Beginnings in West Africa, 1454-1578, p. 186) and I am greatly indebted to him for his permission to publish it here.
- Usefully summarized in J. A. Williamson, Sir John Hawkins, pp. 58-62, 100, 158.
 R. Hakluyt, The Principal Navigations... of the English Nation (ed. Raleigh, 1903-5),
 Vol. vi, pp. 266-84. Edward Cooke of Southampton also appears in this account.

4 Sic throughout, though the proper form was examinate.

And after that the said Mynikin was in a redines, he came therewith unto Thisle of Whight with his said shipp, there to furnishe her of victualls. Where he provided all his victualls as bere, biskett and bieff of Aermyn Richardes. Of whome he allso bought the number of xl peeces Poldavies at xxii* per pece.

And seithe that because the said Cooke had busines to doe at dartmowthe, he went on thethur

before, levinge worde for this examinant to applye after with such spede he could.

At this examinants cumminge unto Dartmowthe, there he founde bothe the forsaid shipps, Thedwarde of the forsaid Cookes and the John wherein the said Edge went. There the said Cooke tooke in viii or x fardells or packes of clothes, Where one Peers shippid him selfe with the said Cooke to goe from thence unto Rochel.

This deponent seithe that John Smithe of Hampton was his master, havinge with him, besides

this examinant, his man and iii boyes, xxi persons, to passe uppon the forsaid voyadge.

He seithe that all thinges beinge in redines, the forsaid iii shipps departed to geathurs to the seas, Directinge ther course towardes Rochel. Where within ii or iii dayes after they arryvid and rode in Charle du boyes, And there anckorid and lay v or vi dayes space, Where the said Cooke went on shore. But what he did or what he provided, this examinant knoweth not, Because neither he nor eny of his cumpanye went there on shore for feare of the plauge then reignenge in the Towne of Rochel.

From Rochel they departed to geathurs myndinge to applye unto the quoast of Gynnea, and so

farder, as the said Cooke would, in whome the knowledge restid for yt there voyadge. And seithe that beinge shott as far as Cape St. Vincent, by reason that the said Edge stode in want of water, he made towardes the mayne, to furnishe him selfe thereof, And for that, that they would not stay, ne be longe lettid, to the henderaunce of ther purposid voyadge, to remayne of that quoast, the said Cooke and this examinant scantid there sayles makinge no greate way, to thend that the said Edge mighte gett him Freishe water agaynst ther cumminge. And seithe, that as he this examinant enterid the said Cape (the said Edge beinge gon in before) he sawe iii sayle there lienge beinge Frenche men. Twoe of them beinge shipps of lx burden a pece and the thrid a vessell of cc Tonnes or there abowte. In the wethur gaige of whome this examinant saylid and passid bye, beringe his flagge abrode. Uppon sight whereof the bigger of the said shipps, makinge a shewe of his men to the number of lx persons, Weyvid this examinant to come to the lyward of him and his cumpanye, But for what cause, this examinant then understode not. And shortly after the said Edwarde Cooke came in, whome in lyke maner they weyvid to come to the lee ward of them, who, not knowing what the matter ment, so did. And after that this examinant and the said Cooke came to geathurs, by whiche tyme the said Edge was cummen unto them, they communid to geathurs of the said Frenchemens stoutenesse, marvelinge what his entente and meaninge should be, Consideringe they had don nothinge unto him, but passid quietly bye. And therefor uppon consultacion had betwixt them, they appoyntid that the said Cooke should goe unto the forsaid Frencheman tunderstand the cause of his stowte showes, and what his meaninge was. At whose cumminge unto them the Frenchemen would knowe, whye they presumid to come in by the wethur gayge of them, with there Flagges abrode, They beinge the greater shipp, Willinge them to take downe and beare no flagges, so longe as they wer in presence. Whome then the said Cooke answerid that if they would have thinglishe flagges downe, they should come them selves on bord and doe it, Otherwise they had none to doe the same. Uppon this occasion they fell to the multiplienge of farder wordes and communicacion, so as the said Frenche shipp havinge shott of her whole side at the said Mynykyn before, weyed her anckers and brought her selfe under her sayles, Whereuppon the said Cookes shipp and the John beinge the bygger of the three, manninge them selves accordingly with the cumpany of the thrid shipp, and appoyntinge all the municion in lyke redines and furniture, gave them selves to withstand the bragge of the said Frenche. And to bickerment and fighte to geathurs, because the said Frenchemen would (as they seid) have downe the Englishe Flagges. In whiche conflict they continued abowte xxiiii howres space. And at the leynthe eche others cumpanyes and shipps beinge sore spoylid and beaton, eche forsoke other and departid. By whiche occasion abowte xiiii of this examinants and his consorts men wer slayne and hurtid, and ther shipps and furniture thereof spoylid, diminishid and spent, And therefore they determinid to leave of ther forsaid appoyntid voyadge and to return home agayne.

Incontinent uppon this, fowle wethur came uppon them; And seperated thon from thother, So as after that, sence the same tyme, this examinant never sawe the said Cooke nor his shipp,

beinge abowte the xiiiith day of november last.

And seithe that whiles he this examinant lay thus in the said foule weathur, hullinge upp and downe in the sea, uppon a certen night (whiles this examinant and his cumpanye wer at ther rest savinge the watche) there came by his shipp a certen sayle runninge before the wynde under forst sayles. At the passinge by whereof the said Watche callid to this examinant, Gevinge tunderstande of the same, Deminge it to be some shippe in distresse and necessitie. Whereuppon this examinant willid his cumpanye to putte sayle to goe with them. And with that as the saile was sett, the cumpanye in the forsaid shipp had made a fier a loft in ther shipp, beinge a token (as this examinant toke it) to have some helpe and succoure, for that danger wherein they stode. And thereuppon drawinge nighe unto them this examinant causid his master to call unto them. Who answerid them selves to be Portugalls, and of the Porte, and in present danger and perill of perisshinge on the sea, Declaringe that they had ben beaton with fowle weathur a longe space before, and had spent ther sayles, mastes and all ther taclinge. And they them selves soe weried and over laborid at the Pompe that they wer no lenger able to continewe, Ande meate and drinck they had none to refreishe and succor them with all. And therefor, For Gods sake they prayed this examinants helpe for the savinge of ther lyves, Or ells they should be lost in the Seas. Offeringe to give this examinant for soe doinge bothe ther shipp and goodes. Whereuppon this examinant beinge movid with ther lamentable caase, taried with them and sent his men uppon bord them to helpe them to labor, gave them meate and drinck, and succorid them all that he could, Insomuche that this examinant vierid furthe a cable and fastenid the same to the said Portingall Barck beinge a laten Barck, Towinge her ii dayes to geathurs, to thende he mighte bringe her to some shore or other. Which would not be, by reason of the weakenes of the same, beinge an olde and verye leaky vessell, Neither was there in her eny apparrell or tacle to bringe her away. And therefore, because the cumpany made pitifull mone for the savinge of ther lyves, this examinant receyvid them into his shipp, beinge in number xvi persons and one Jewishe woman, for feare of the fowle weathur, wherebye they had ben all cast away if they had remaynid uppon bord ther owne shipp. And then by the said Portingalls consent and will this examinant toke furthe of the said latten barck habowte xxx chests of sugers and uppwards, Whiche made full xxv chests, and abowte the quantitie of v Tonnes of Brasell. And seithe that whiles this was a doinge the bovenamid Edge came by chance to this examinant, who talkid with the said Portugalls And sawe the distresse and necessitie that they then stode in. Whome this examinant then movid to take unto his shipp parte of the said laten Barcks ladinge for the savinge thereof. Who because the night came on and mistrustinge fowle weathur, beinge uppon the lee shore, and for that he wantid grownde tacle, refusid to have eny parte thereof. Who then had from the said shipp one of her anchers And after that departid.

And seithe that he this examinant made to come with the Isles of Bayona, to sett on land the said Portugalls, And by chance came rowner with that place and putt them on shore in the havon

of Moughe.

That don this examinant and his cumpanye came home arryvinge at Ichinor forsaid abowte the xth of this presente Decembre, Bringinge with him the forsaid sugers and Brasell.

[Mr K. R. Andrews is a student in the field of English maritime and commercial expansion in the sixteenth and seventeenth centuries, and was recently awarded a doctorate in London University for a thesis on Elizabethan privateering in its social and economic aspects. Ed. M.M.]

THE 'NEF' SHIPS OF THE RAVENNA MOSAICS

By R. H. Dolley

ALTHOUGH some of the most ancient of the Ravenna mosaics are already well known to students of naval archaeology, during a recent visit I was fortunate enough to come across fragments of a nedieval pavement that, to the best of my knowledge, have not been noticed n any of the periodicals devoted to nautical research. Readers of my notes on the rig of the medieval warships (M.M., January 1949 and April 1950), and of Dr Bowen's comments thereon (M.M., January 1950), may also be struck by the pavement's relevance to the devices by which Leon of Tripoli

gained possession of Thessalonike in 904.2

The surviving fragments, together with mosaics of considerably earlier date, are carefully preserved along the interior walls of the church of San Giovanni Evangelista. Despite serious bomb damage in the late war, the church itself is remarkably well preserved and much of the fabric appears to belong to the fifth-century basilica which the empress Galla Placidia founded to commemorate her miraculous preservation from shipwreck.³ Unfortunately its marshy site has wrought havoc with the floor, and the original pavements have had to be remodelled on more than one occasion owing to uneven subsidences. One of these restorations, or more properly redecorations, is clearly to be referred to the Crusading epoch, and is represented by some eight or nine fragments of what must have been a pavement of considerable size.⁴

In concept and in treatment alike the original design would appear to have had affinities with the Baveux tapestry. The arms and armour depicted certainly suggest that it was executed during the period when Norman influence in Italy was at its height. The problem facing the historian is to identify the precise occasion of a pavement that obviously commemorates

an incident of major historical importance.

On one of the fragments appears the legend Constantinopolim, together with a representation of a tower of several storeys, and this suggests

1 Cf. Torr, Ancient Ships, pp. 17, 90, 139 etc.

4 The largest of the surviving fragments are each of approximately 20 sq. ft.

² Dolley, op. cit. and sources therein cited. It is a pity that I had not come across the Ravenna mosaics before the appearance of my reply to Dr Bowen. Pl. I (a) shows that Leon's 'improperly balanced truss' not only was feasible but was to be repeated with equal success on a subsequent occasion.

³ For the bomb damage cf. Works of Art in Italy: Losses and Survivals in the War, Vol. 1, p. 52.

that the pavement may be connected with either the First or Fourth Crusade. However, the fact that an armed Frank strikes a hostile pose cannot of itself establish that the subject was the Latin conquest; it is well known that Alexios I had his difficulties with the leaders of the First Crusade and notably with the Italo-Norman heirs of Guiscard. There are, however, two pointers that leave little doubt but that it is the Fourth Crusade that is depicted.

Three of the fragments represent ships, and in each of them the ship is of the 'nef' type. In 1095/6, however, the vast majority of the ships of the Crusaders were of the galley type.² Moreover, one of the fragments shows a 'nef' attacking a tower of several storeys which is broadly comparable with the tower represented in the fragment bearing the legend Constantino-polim.³ Here, it is as well to note that the Crusaders of 1204 were particularly impressed by the height and the number of storeys of the towers along the walls facing the Golden Horn.⁴ Indeed it was only with considerable difficulty that they could be persuaded not to attack the much lower walls along the Marmora where the strong current would have proved an insuperable obstacle to any concerted assault.⁵

Readers of Sir Edwin Pears's Fall of Constantinople, still after more than sixty years a most useful compendium of the Greek, Latin and Frankish sources, will remember that in 1203 and 1204 alike the Venetians and Normans overcame the seaward defences of the 'City defended of God', by swarming up the reversed lateen yards of their ships.⁶ This was of course the very manoeuvre employed against Thessalonike by Leon of Tripolis exactly three hundred years before, but the comparatively greater beam and draught of the 'nef' no longer necessitated the ships being lashed in pairs, except during the final attack when an increased concentration of manpower opposite certain prime objectives was desired.⁷ The Ravenna fragments show remarkable coincidence with the narrative of the Norman chroniclers.⁸ Not only do we find a Frankish knight climbing up the

1 Cf. a large modern literature on the subject.

2 Cf. Buckler, Anna Comnena, pp. 384-6. Her interpretation of certain Greek terms, however, appears to need revision in the light of the Western sources.

3 Pl. 1 (a).

- 4 Pears, The Conquest of Constantinople, p. 181, etc. 'Ne onques nulle ville ne fu si bien hordee' etc.
 - 5 Villehardouin, La Conquête de Constantinople, ed. Faral, Vol. 11, pp. 40-1, etc.

6 Villehardouin, op. et ed. cit., Vol. 1, pp. 172-83; Vol. 11, pp. 32-5, etc.

7 Op. et ed. cit., Vol. II, p. 40-3: 'mais la summe del conseil si fu tels que il...lieroient les nes, ou les eschieles estoient, II. et. II.: ensi assauroient. II. nes une tor, por ce qu'i orent veu que a cel jor n'avoit assailli que une nef a une tor, si estoit trop grevee chascune per soi....' It is clear that the decision to link the ships in pairs had nothing to do with their stability.

8 One passage in Robert de Clari merits quotation in full: 'Adont fist li dux de Venice moult merveillex engiens faire et moult biaus: car il fist prendre les antaines, qui portent les voiles de nes, qui bien avoient XXX toises de lonc ou plus: si les fist tres bien loïer et atakier à boines cordes

reversed yard of his 'nef' but the mainsail is shown furled. From Villehardouin we learn that the larger ships each carried at least one mangonel in her waist for counter-battery work against the Byzantine artillery, and obviously the sails would have seriously interfered with the arc of fire. The other Norman sources are too numerous to be cited here, and I will only quote M. Edmond Farel's independent analysis of their descriptions of the 'floating siege-towers':

La plate-forme etait soutenue par les antennes du navire, dressées verticalement et liées au mât. On y accedait par des échelles et elle était blindée d'une solide épaisseur d'étoffes. Elle surplombait la mer, en avant du vaisseau, d'une hauteur de 100 pieds, selon Hugues de Saint-Pol, de 40 toises selon Robert de Clari.²

Not only would these conclusions appear to vindicate completely the arguments by which I maintained my original interpretation of the text of Ionnes Kameniates, but they receive striking confirmation from the mosaics which I reproduce.

It may be accepted then, that the mosaics of San Giovanni Evangelista depict incidents of the Fourth Crusade.³ The student of naval archaeology does not need to probe further: to attempt to decide, for example, whether the attack is the abortive assault of July 1203 or the final onslaught of April 1204.⁴ It is sufficient for his purpose that he has three representations of ships which can be dated so precisely to the first quarter of the thirteenth century.⁵ Two of these are reproduced as illustrations to this article, the third does little more than duplicate the stern appearing in Pl. 1(b).

All three ships are of the 'nef' type, cargo-carriers rather than warships. Characteristic features are the projecting forecastle carried well forward, and the massive poop, features common to the ships of National Gallery 4250, and Pal. Grec. 367, f. 89, two pictorial sources I hope to discuss in

as mas, et fist faire boins pons par deseure, et boins puis en costé de cordes: si estoit li pons si lés que iij. chevalier armé i pooient aler de front; et fist li dux les pons si bien warnir et couvrir as costés d'esclavinnes et de toile, que cil qui i montassent pour assalir n'eussent warde, ne de quarriaus d'arbalestes, ne de saietes; et lanchoit li pons tant avant outre le nef qu'il avoit bien de hauteur du pont dusques à tere près de XL toises ou plus, et a casun des vissiers, avoit i mangonnel qui getoient ades as murs et en le vile.'

I Villehardouin, op. et ed. cit., pp. 174, 175: 'Lor veissiez mangonious giter des nes et des

2 Villehardouin, op. et ed. cit., Vol. 1, p. 165, n. 7.

3 Cf. Baedeker's Northern Italy (1930 edition), p. 502, where this identification is proposed without discussion.

4 The balance of the evidence points to April 1204, but a certain identification of each single incident seems impossible in the present state of our knowledge.

5 Baedeker, op. et pag. cit., dates the mosaics to 1213, doubtless on the authority of one of the Italian or German studies touching on their artistic importance.

future notes. Forward, three vertical strakes at the waterline suggest some form of strengthening of the type recommended by Leon VI in his treaty on naval warfare. No less clearly depicted are the barrel tops and the vertical strips of cloth composing the sails. As one would have expected at this period, the foremast rakes sharply forward. Unfortunately the steering arrangements are not so clearly defined, but one thing is certain: there was no rudder in the modern sense of the word. An interesting detail is the 'buccinator' stationed in the maintop of the vessel in Pl. 1 (b).4

It may be objected that the Ravenna mosaics have little new to teach us. While at first sight they no more than corroborate the evidence of our other sources, it should be remembered that they possess a special interest in that they are executed in a novel medium. Moreover, it is a medium that of its very nature precludes the depiction of superfluous detail. The artist, very probably an eye-witness of the events, has rendered the features of contemporary naval architecture that most impressed him. No less interesting are the obvious affinities between the 'nef' depicted in Pl. 1 (b), and those of the National Gallery 4250 and of the Pala d'Oro of the Cathedral of San Marco at Venice, but a detailed analysis of all the points of resemblance and divergence lies outside the scope of this present article. It is sufficient to note that we have here three broadly comparable works executed in three widely different media by three artists, all working under strong Venetian influence.5 In my submission, the Ravenna mosaics are worthy to rank on their own merits as masterpieces of primitive marine art. The camera simply cannot convey their subtleties of light and movement when they are freshly sprinkled with water, nor the amazing power of their blues and golds.6 These seem to owe their unusual depth and beauty to the fact that they were executed with tesserae purloined from lost masterpieces belonging to the high summer of Byzantine mosaic art. In conclusion, I would like to thank the Archbishop of Ravenna for his courteous permission to reproduce the two photographs that accompany this article.

2 Léon, De navali praelis, c. 4 = Dain, Naumachica, p. 19.

4 Cf. Leon, op. cit., c. 45 = Dain, op. cit., p. 27; Pears, op. cit., p. 340, etc.

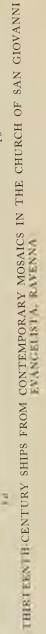
5 The authorship of Nat. Gall. 4250 is in dispute but the relevant portion, the St Elsinus, Apparition, is usually ascribed to the fourteenth century.

6 Baedeker's epithet 'crude' might perhaps be explained by the complete contrast afforded by the mosaics and their setting.

The MS. source is a medieval treatise on the computation of tonnage drawn up for the guidance of the Byzantine Customs. Outside Greece it is almost unknown, and it is likely to remain so until translated such are its numerous demoticisms and solecisms.

³ Pl. 1 (b) suggests a single steering-oar suspended on the starboard quarter, but it should be remembered that the artist gave himself considerable licence, witness his omission of the sweeps by which the 'nefs' were undoubtedly manoeuvred during the final assault.















RELIEFS ON THE TOMBS OF (a) ADMIRAL ALEXANDER CONTARENI AND (b) HYRONIMO MICHAELI, IN THE CATHEDRAL OF ST ANTONIO, PADUA

DOCUMENTS

The following three papers are from the private collection of one of our members, and have kindly been lent for reproduction. [Ed. M.M.]

Gentlemen,

For the pursueing of the service of this Comonwealth in which the ffleet now before Lisbone is engaged, the Councell hath resolved that sixteene Ships shall be appointed thereunto went they have concluded shall be made up by the sending of fower of the Ships weh are appointed to be [this] winter guard by continueing fower of the Merchants ships which went in the last ffleet, and by the allotting of eight such ships more out of those weh are there already as the Generalls shall thinke fit, excepting onely the Resolution, which ships Wee estimate may take up fowerteene hundred men, and to be victualled for fower moneths to come, and a fitting supply of ground tackle Cordage and other things is likewise to be made & sent away with the provisions; Wee desire you that you will Estimate the charge of these particulars and certifie the same unto the Councell together with the tyme in weh you conceive they may be provided, and you are likewise to consider weh fower ships of those which are appointed to be of this Winters guard, are most proper to be employed in those parts, and to returne yor opinion herein; ffor the Merchants men which are there already you are to give them notice that they are to victuall themselves for fower Moneths longer than the six months, for weh they have beene already victualled, to the end they may be enabled to continue in the service to weh they are designed, to all weh Wee desire yor answers on Monday next in the afternoone.

Signed in the Name & by Order of the Councell of State appointed by Authority Io: Bradshawe Pisid!

of Parlament.

Whitehall 21 Sept: 1650

> (Endorsed) 21 September 1650 C.H. for 16 shipps to be continued on the Coast of Portingall and to make an Estimate of their charge whereof 4 of ye 16 to be sent from here & 4 Merch! Shipps to be continued yt are now there in ye service.

(addressed) For the Comissionrs of the Navy.

Gentlemen,

Wee being credibly informed that the Lawrell ffrigott which was lately built at Portsmouth is a very good Saylor, and a well built ffrigott, have thereupon thought fitt, that the master Shipwright at Portsmouth doe forthwith goe in hand with the building of another ffrigott with the States Timber of the very same Dimensions the Lawrell is off, And doe desire you to give order to the master Shipwright there to goe in hand with the building her with all the speed that may be, and that you recomend it to Capt. Moulton your fellow Commissioner there to have a care that shee be well built with good and sound Timber, and that he be careful to see that the master Shipwright doe not vary from the Dimensions of the Lawrell.

Signed in ye name and by order of ye Councell of State appointed by authority of Parliam[‡] P. Lisle presid t.

Whitehall 27th February 1651 To ye Comrs of ye Navy.

(Endorsed) 27 Feb. 1651. C.S.

Mr. Tippetts to goe in hand with building another ffrigtt of ye same dimensions as the Lawrell is off, and to compleat her with all expedicon.

For the Comissions of the Navie

NOTES ON THE LAUREL

Built 1651. Keel 103 ft.: beam 30 ft. 1 in.: depth in hold 15 ft. Net tonnage 489. Guns 38. Wrecked 1657.

1653. 18 Feb. Flagship of Samuel Howett, Rear-Admiral of the Red, in the battle off Portland against the Dutch.

1653. 2-3 June. Took part in the battle of the North Foreland, commanded by Capt. John

Stoakes, then mounting 48 guns.
1653. 30 July. Commanded by Capt. John Stoakes (who was wounded) at the battle of

Scheveningen.

Commanded by William Crispin, and formed part of Penn's fleet destined for the West Indies. Mounted 40 guns and carried 160 seamen and

30 soldiers. Classed 4th rate.

15th October 1653
At the Com. tee for Irish and Scotish Affaires.

Whereas the Councell by an order of the 10th of August last referr'd the Remonstrance of Cap.^{ne} Henry Apleton to this Com.^{tee} to consider thereof and report their opinion to the Councell, This Com.^{tee} having considered of the same and finding something therein charged or reflected on Cap.^{ne} Richard Badeley as to the loss susteined by this Comonwealth at the fight of Legorne Rhoade. They acquainted Cap.^{ne} Badeley therewth and recd. from him an answer in writing. And after hearing both parties on severall daies and times, The Com.^{tee} are of opinion that (however they not knowing the grounds or motices w^{ch} eache went uppon or the circumstances that occurr'd to eache at the instant time of action and having therfore taken upp misapprehensions doe lay blame eache uppon the other yet) They both according to their best understandings and judgem^t did pforme their duty and discharge their trust.

And therfore the Com. tee humbly propose to the Councell That they both bee by order of the Councell required to desist from any further printing one against the other And that Cap. Apletons accompts may bee putt into a way to be taken either by the Com. for the Navy at Tower Hill or otherwise as the Councell shall see meete, And whereas hee prayes a consideracon of his service and sufferings The Com. tee humbly submitt it to the wisdome of the Councell what they may see fit to doe therein, His losses and sufferings having fallen very heavy uppon him,

Wm. Constable Jo. Barkstead John ...

(Endorsed) 15th October 1653

Report uppon the remonstrance of Capⁿ Appleton and hearing both him and Capⁿ Badiley concernong the fight at Sea neere Legorne

RELIEFS ON TOMBS AT PADUA

Query no. 10 (1950) in the M.M. referred to ships on tombstones. I am able to contribute some notes on the same subject. The photographs (Pl. 2) represent reliefs on the tombs of Admiral Alexander Contareni and Hyronimo Michaeli in the cathedral of St Antonio at Padua. The first is an imposing monument standing by the main entrance against the inner side of the second pillar on the left. It has the following inscription on a copper or bronze plate:

HANC ALEXANDRI CONTARENI. VENETAE CLASSIS CUM SUMMA POTESTATE FORTISS' LEGATI DIVI MARCI PROCURATORIS QUEM NEC VENTI IN PERUCILOSIS REIP TEMPORIS RETARDARUNT UNQUAM / ET HARIDENUS BARBAROSSA OTHEMANI CAE IMPERATOR POTENTISS' SAEPE TIMVIT TAM MIRABELI ARTIFICIO DVCTAM EFFIGIEM / MAGNI INDICEM ANIMI / PRAECLARUMQ / TOTIUS MARITIMAE DISCIPLINAE SIMULACHRUM / UT POSTERITAS HABERET QUOD INSTAR / IMORTALITATIS' AC GLORIAE VNICE COLERET / NE QVIDIQ PATAVINO SPLENDOZI DEESSET / PETRUS' ET PANDULPHS' FRAT OP. T' P'

VIXIT ANN LXVII DIES VIII OBIIT XVII KL APRILLIS MDLIII.

Below, on fine-grained Travertin limestone, beneath the feet of two carvatids is inscribed:

FACIEB ALEXANDER VICTORI

The carved relief, measuring about 85 by 400 cm. depicts one galley sailing towards the left, three more sailing to the right, and a fifth sailing away from the spectator. The vessel on the left clearly shows her port anchor as three-armed and fitted with a stock.

The other monument is on the fourth pillar and is not so finely executed. It represents two galleys with one mast each, and one with two masts. The inscription reads:

HYRONIMO MICHAELI FRATRIT (? PATRIT) VENETO REI NAVALIS OBIT 1557

J. W. VAN NOUHUYS

(Mr R. H. Dolley points out that the right-hand portion of the Contareni relief is reproduced in *Naval Warfare under Oars* by Vice-Admiral William L. Rodgers, Annapolis 1939, fig. 35. Ed. M.M.)

THE ADMIRALTY TELEGRAPHS

Since writing my articles on this subject in the M.M. (April 1938 and July 1939) I have had many enquiries, and have received much useful information from correspondents (even during the war). Therefore I think it best to append a fresh list of the Admiralty stations on the Murray and Popham systems to replace the Appendix on pp. 200-3 of The Mariner's Mirror, Vol. xxiv, no. 2. In 1946 I visited the sites on Murray's route to Deal, and in 1947 explored the whole of the line from London to Yarmouth; and found nothing! In fact, the whereabouts of the shutter stations between Woodcock Hill (Elstree) and Lilley Hoo (Herts), vaguely stated to have been at St Albans and Dunstable, seem to be more doubtful than ever. At St Albans the station is now said to have been on top of the ancient town clock tower; then there is a stretch of eleven miles before we reach Mount Pleasant, a suitable eminence of 750 ft. on Dunstable Downs. The trouble about this arrangement is that the line is steadily going in a north-westerly direction, away from the coast, and then abruptly has to switch to a north-easterly direction on the line through Lilley Hoo towards Yarmouth. This would have necessitated two telegraph frames at Dunstable, with a correspondingly augmented crew. It may have been done, and it is to be hoped that further research may clear the matter up.

Some pleasing contemporary water-colour sketches have been found in Guildford showing what Pewley Hill semaphore looked like. The existing cupola proves to have been a subsequent addition and it was not there in the days of the semaphore. Another useful water-colour has been found in the Telegraph Inn, Putney Heath, showing that the semaphore there on the Portsmouth line was of the bungalow, or Type 'A', pattern, exactly like the houses still standing.

HILARY P. MEAD

SITES OF THE ADMIRALTY TELEGRAPH STATIONS

Lord George Murray's Shutter System

CHATHAM, SHEERNESS AND DEAL (JOINT) LINES, 1796

Admiralty 36 West Square, Southwark. (Between Imperial War Museum and the Elephant and Castle) Telegraph (map of 1799) New Cross Gate, Plow Garlic Hill (Nunhead) Telegraph Hill Shooter's Hill Telegraph Hill and Old Telegraph Swanscombe Gad's Hill, Shorne. (Beside the main road to Gravesend) Telegraph Hill Chatham Yard Beacon Hill (Between Luton and Brompton) Calham Hill (Callum) (Near Lower Halstow) Tonge Shottenden (Old Wives Lees) Barrow Hill Queenborough Barham Downs Sheerness Yard (Boat-house roof) Betteshanger Telegraph Farm

Portsmouth Line, 1796

Admiralty
Royal Hospital, Chelsea (East wing)
Putney, The Highland. Telegraph Inn, Telegraph Road
Cabbage Hill, Ashtead Telegraph
Netley Heath, Hockhurst Downs. (At cross-roads, 1' N.E. of Gomshall)
Hascombe (½' S.E. of church)
Blackdown, Romsell (1½' E. by N. from Fernhurst church)
The Beacon (795 feet) (1½' E.S.E. of S. Harting village)
Portsdown Hill
The Glacis, Portsmouth

Deal

PLYMOUTH LINE, 1806

(Portsmouth line as far as The Beacon)
Chalton (Charlton) (600 ft.) 1' W. of Chalton village, next to a windmill
Wickham (1½ E. by N. from the church)
Town Hill (House) Southampton (2½ E.S.E. from S. Stoneham church)
Toot Hill (276 ft.) (2½ S.E. of Romsey)
Telegraph Wood
Bramshaw (2½ W. of village)
Telegraph
Pistle Hill (2¾ S.E. of Cranborne church)

Chalbury (Chalbery) (close to the church) (N. of Wimborne Minster) Blandford (Race-course) (11/4 E. of Pimperne church) Belchalwell, Bell Hill (846 ft.) (4' S. of Sturminster Newton) Nettlecombe Tout (850 ft.) (2' S. of Mappowder) High Stoy (1' N.N.W. of Minterne Magna) Telegraph Hill Toller Down (812 ft.) (21/W. of Rampisham) Lambert's Castle (842 ft.) (4½' E. of Axminster) Dalwood Common (629 ft.) Telegraph Cottage St Cyrus (St Cyres Hill) (828 ft.) 1' N.N.W. of Honiton Dalwood Common (629 ft.) Rockbeer (Rockbeare) (140 ft.) 6½ east of Exeter Great Haldon (766 ft.) Telegraph Hill and Telegraph Wood Kneighton (352 ft.) 4' N.N.E. of Ashburton Telegraph Hill Marley (472 ft.) (Syon Abbey) 5' W. of Totnes Lee or Ivybridge (242 ft.) Telegraph Hill Saltram, I' W. of Plymouth Earle

YARMOUTH LINE, 1808

Admiralty

Mount Wise

Royal Hospital, Chelsea (West wing)

Hampstead (Platt's Lane, by Finchley Lane) Telegraph Hill

Woodcock Hill, Hertfordshire (1/2 S.S.E. of Borehamwood station, near Elstree)

St Albans, Hertfordshire

Dunstable, Bedfordshire

Lilley Hoo, Hertfordshire (602 ft.) Telegraph Hill, 5½ W. of Hitchin

Baldock, Hertfordshire

Royston, borders of Hertfordshire and Cambridgeshire

Gog-Magog Hills, Cambridgeshire

King's Chair, Side Hill, 14 E. of Newmarket

Icklingham, Suffolk Telegraph Plantation, I' N.E.

Barnham, borders of Suffolk and Norfolk

East Harling, Norfolk Telegraph Hill, close by

Carleton Rode Telegraph Farm, 1' N.W.

Wreningham

Mousehold Hill (now a public park)

Strumpshaw

Yarmouth (on the tower of the South Gate)

Sir Home Popham's Semaphore System

CHATHAM LINE, 1816 (experimental only)

Admiralty

West Square

New Cross

Red Hill, Chislehurst

Rowe Hill, Wilmington (Dartford)

Betsham (not far from Swanscombe)

Gad's Hill

Chatham Yard Beacon Hill

Calham Hill

PORTSMOUTH LINE, 1822

Admiralty

Chelsea Military School

Putney Hill

Kingston Hill Telegraph Hill Cooper's Hill, Esher (surviving)

Chatley Heath, Cobham (surviving)

Pewley Hill, Guildford (surviving)

Bannicle Hill, Godalming Haste Hill, Haslemere

Holder (Older) Hill, Midhurst (surviving)

The Beacon Telegraph House (converted) Compton (500 ft.) ½ E. of Compton village

Camp Down, Bedhampton ½' W. of village

Lumps Fort, Southsea High Street, Portsmouth Semaphore

Telegraph Hill Farm (surviving)

PLYMOUTH LINE, 1829 (not completed)

(Portsmouth line as far as Chatley Heath)

Worplesdon Glebe (next the church)

Poyle Hill (west end of the Hog's Back)

River Hill, Binsted (surviving)

Farringdon Common (Four Marks), 1½ N. of Tisted (surviving)

Merifield, I' N.W. of Privett railway station

Cheesfoot, 2' E.S.E. of Winchester

Farley Chamberlain (surviving)

Sherfield English (surviving)

Woodfield Green

'NEFS' OR 'CORBITAE'

In his Note in the M.M. for May 1952, R.H.D. discusses a photograph in Vice-Admiral Rodgers's Naval Warfare under Oars of the sculptured relief on the Leaning Tower of Pisa illustrating two ships circa A.D. 1200. He states that the stone is a carving of the Roman rather than the medieval period and offers a photograph as evidence that the ships are 'corbitae' rather than 'nefs'.

R.H.D.'s photograph and the illustration in Admiral Rodgers's book are similar but are not of identical subjects. The sculpture on the Leaning Tower is unmistakably of thirteenth- and four-teenth-century ships. Even though their foresails are strongly reminiscent of the Roman artemon, the fore and after castles positively identify them as medieval. Close examinations of R.H.D.'s photograph of 'a bas-relief in the wall of the cathedral at Pisa' shows no evidence of castles or an artemon on either ship. The arrangement of the vessels in relation to the towers and the shapes of the towers are so similar that they indicate that one is a copy of the other.

My interpretation of the puzzle with the aid of an encyclopedia follows. The cathedral at Pisa was built in 1063 to commemorate a naval victory near Palermo. Much of the ornamental material used in its construction was the spoil of various Pisan victories. The bas-relief in question is probably a Roman sculpture, and a spoil that was considered a fitting addition by the builders to an edifice to immortalize a naval victory. The Leaning Tower was completed in 1350. The artists who adorned its walls were no doubt inspired by the sculpture in the cathedral and copied the cathedral's ships in the stone carving on the Leaning Tower either because the original had some special significance in Pisan history or just because they liked it. However, in copying they were confused by what they saw in the Roman carving and what the ships they could see every day in the Pisa harbour really looked like. The result is that the Leaning Tower sculpture is a copy of a Roman bas-relief that has been 'modernized' (i.e. 1350) by devoted but unlearned artisans who could not appreciate that the ships of bygone times did not necessarily have to resemble those of their own era.

George M. Cunha

ROYAL NAVY'S TIMBER PROBLEM

The detailed article in the M.M. for February 1952 on this subject is a reminder of how exceptional the governments have been which have been able to study history and learn from it! Another great maritime power, the Republic of Venice, had suffered increasingly all through the later Middle Ages from shortage of timber suitable for keeping her merchant navy and fleet at sea. Not only was this a primary factor in the development of a military and continental policy by this essentially maritime power, but it led, unless I am mistaken, to the first attempts to make a serious study of forestry: one of the innumerable cases of maritime necessities exercising a beneficial and progressive influence on society as a whole.

Mr Albion surprisingly makes no mention of the forests of Ireland, which were still very considerable in the early part of the period he reviews, but which by the end of the eighteenth century had disappeared. It is accepted in Ireland that our oak forests went to build the ships by which the British government kept the French out of Ireland, and Swift in one of his diatribes certainly implies that Irish timber was building English ships in his time (early eighteenth century).

I suspect myself, however, that the destruction of what was left of our oak and other forests in the eighteenth century was chiefly the result of extensive iron-smelting here (also probably for British naval needs!), with the express purpose of retaining the woods of England for shipbuilding. It is I think a matter of sufficient interest to warrant the hope that Mr Albion may be able to supply the facts.

Certainly at the period of the final conquest by the Tudors, Ireland was looked upon as an inexhaustible source of timber for building English ships. Moreover, throughout the bitter struggles of the sixteenth century, fear was expressed by English officials that Irish timber would continue, as it had for some time been, to be at the disposal of Spanish shipbuilders, this very

fear hastening the tempo of the conquest.

Miss A. K. Longfield, in her exhaustive Anglo-Irish Trade in the Sixteenth Century, quotes a customs entry for Bristol for 1492 of '...350 ship boards at £1 per 100', one for Milford and Cardiff for 1586 of '12 oar blades (each for 6/8)', and many similar numbers of prohibitions of export of shipbuilding timber to Scotland, then hostile to England, prohibitions which seem to have been ineffective. How long did this kind of trade go on?

J. E. DE COURCY IRELAND

TIMBER FROM IRELAND

The M.M. for February 1952 contains an article of great interest entitled 'The Timber Problem of the Royal Navy 1652-1862' by Mr Robert G. Albion, author of Forests and Sea Power. The document reproduced below is from the Sergison Collection of MSS. preserved at the National Maritime Museum, Greenwich, and bears out so strikingly so many of the points made by Mr Albion that it is thought that readers of the M.M. may be interested. The climate of Ireland seems to have had the worst possible effect upon the succession of 'purveyors' sent over to procure timber and, as the Navy Board wryly put it 'these agents tantalized us with frequent accounts of what vast quantities of timber of the best sorts were to be had there, but sent us none'. So far from occupying themselves with the Navy's interests, the two individuals whose proceedings are chronicled below appear to have concerned themselves pretty successfully with their own, finally emerging with a project which they submitted to the Admiralty and which the Navy Board had little difficulty in pulling to pieces. The Navy Board's report is well worth perusal, not only for the value of the subject discussed, but for its commendably restrained tone, its patient explanation of the circumstances, and (one cannot help feeling) a note of dry humour. I have R. D. MERRIMAN modernized the spelling throughout.

Navy Board to Admiralty

24th March 1693

Right Hon'ble,

It was in the month of December 1690, upon a proposal of the Earl of Strafford of presenting to their Majesties so much timber out of his Lordship's forest in Ireland as would build four 1st-rates, and the information received from Green and Sheldon at the same time, of the vast quantities of timber useful to the Navy, to be had in that Kingdom out of the forfeited woods etc. that your

Honours were pleased to order these two persons to be sent over thither as purveyors, to procure and send for England such knees, standards and other principal timber as could be had there, fitting for the

service of their Majesties' Navy.

Sheldon, in the year 1692, died, and one John Nash, a shipwright belonging to their Majesties' Yard at Sheerness, at the recommendation of Sir John Tippetts (then Surveyor of the Navy) was sent to supply his place; upon whose arrival Green absconded, and could never be heard of since. After this, one Thomas Knox, at the instance of the Lords Justices of that Kingdom and the desire of Nash, was appointed to fill Green's place. And these two, just as their predecessors had done before, tantalized us with frequent accounts of what vast quantities of timber of the best sorts were to be had there, but sent us none.

This occasioned our writing several letters to them, to put them in mind of their Instructions and, instead of travelling up and down the Kingdom, to fix at some of the places most convenient for transportation, where this timber was to be had, and hasten over some supplies, that we might receive some of the fruits of their labour. At last, the *Katherine* and *Greenfish* came over, laden with timber, trenails and oars. But the oars did not prove fitting for the Service and the timber, though good in its kind, yet so

small that it was worth little more than its freight.

Hereby we were led to take notice again of their mismanagement, to which they answered that their freights were part of the goods provided by their predecessors, and that as we had ordered, they would take care to dispose of the rest of the small stuff in the country to their Majesties' best advantage, apply the money to the carrying on the said service, and send over now and for the future but principal pieces. And freighting two Dutch ships soon after, upon very extravagant terms, we expected something extraordinary of them, but were mightily disappointed for, ordering one to be unloaded at Sheerness and the other at Chatham, we found by a personal view, at our late being at those places, as well as by the officers' accounts, that the said loadings did consist of nothing but small timber, near half of it straight, and but two knees; whereas every letter we had written to them inculcated the particular scarcity and worth of that commodity and urged them, in their provision for the Navy, to have a principal regard thereto.

It troubled us exceedingly, after so much expense of time and charge, to find no better effects of it. Nor was our wonder less to know what should be the reason that, after so many plain instructions given to these gentlemen and so many promises made on their parts to observe them, they should proceed quite contrary thereto, till your Honours' order of the 9th instant came down, enclosing to us a proposition of theirs of using the timber provided for the Navy, in Ireland, in building ships there. By which we perceive they have been industriously employing themselves all this while to render this design unprofitable (if not impracticable)/in order/to carry on another of their own; on which we come now to give your Hon's our remarks, in obedience to your commands on that behalf, praying your pardon for this tedious introduction which, nevertheless, was thought necessary for letting your Hon's into the knowledge of what hath passed in this affair.

And first: they tell your Hon's in the preamble of the said proposition, that they have viewed most of the woods in the Provinces of Leinster and Munster and have felled great quantities of trees, and sent away four ships laden with timber, ash oars and trenails (two others being also now at Cork, loading) but the freight at this time for England, especially for the River of Thames and Medway, being so high as 45/ or 50/ per load, convoys difficult to be had, and the hazard of the seas great, besides their expense upon the place, 'tis to be feard that it will never turn to account (though the timber be the King's) more than to save so much of the growth in England. Upon consideration of which, as well as duty to their Majesties' service, and that an undertaking so beneficial to this Kingdom at this time may go on: the said

Nash and Knox do humbly propose as follows...etc. To which we answer:

(1) That having never been able to obtain a methodical or regular account from these gentlemen of the timber they have felled in that Kingdom, we cannot well determine what the said trees are, either as to quantity or quality. But your Hon's as well as we are judges, by what we have said before, of what is come over; and if the rest is no better, doubtless it is not worth fetching away. But from this very proposition, we are inclined to believe they have not only kept the best behind, but augmented the freight to render their own designs more feasible.

(2) 'Tis true the seas are hazardous, convoys chargeable and sometimes difficult to be had; but the vast expense of timber in this Kingdom thins it so fast, especially compass, knees and large, straight timber, that this project of supplying the same from Ireland, which was undertaken on these very considerations, is not, in our opinion fitting, after such a chargeable progress has been made in it, to be let fall. If it cannot be made serviceable to the ports on this side of the Kingdom, it may, in all probability, become useful to Plymouth, which may be almost as well supplied from thence as from Hampshire (from which its supplies usually come) as also to Kinsale, if it should be thought fit to make that a port for their Majesties' ships, to resort to for cleaning and repairs.

(3) As their own argument of saving so much of the growth/of timber/of England bears a very great veight, so it is hoped, if it shall be thought fit to continue them in this business, they will make the expenses upon the place as easy to their Majesties as possibly may be.

Then they come to the arguments for the said proposition which, as we humbly conceive, without the

east inquiry as to the sense of them, may be thus stated, viz:

(1) That there is a convenient place in the town of Ross for building ships, and plenty of timber and

plank near at hand for the said service, and moulds provided for two 4th-rates.

(2) That there are smiths, furnaces and forges, not only for supplying iron-work for building and furnishing the ships, but capable of making anchors and casting guns, if need be; as also shipwrights and caulkers, about 150, in those parts, to be had at reasonable rates.

(3) That the commodities of the East Countries and New England, such as masts, cordage, pitch, tar, sails, and other things necessary for that purpose may be brought thither as easily as to England. And:

(4) That the town of Ross having, at the recommendation of the Lords Justices, given a place of building for an encouragement to begin the said work, so they will use all possible good husbandry therein or proceed by way of contract, taking off their Majesties' timber and plank at a market price.

Now, their proposition being thus stated, it is, in the first place to be observed that these gentlemen, without giving the least hint of their design to this Board, have gone so far as to prepare moulds for the building of two 4th-rates, out of the timber and plank provided for the service of their Majesties' Navy here in England, and continually expected from them, and obtained, by the recommendation of the Lords Justices, a place in the town of Ross for that purpose. By which it is plain they had along deluded as with hopes of what they never intended to perform; by which the Navy might have been mightily disappointed if we had wholly, as we did partly, rely on them for supplies of knees, standards and other principal timber for the service thereof. But:

(2) As to the proposition of building men-of-war at Ross: It may, for ought we know, be a place convenient for it, none of us having been there, and it is very probable timber and plank may be had thereabouts, fitting for that purpose, at modest rates. But if iron work and all other materials necessary for the said service are as easily to be had, how comes it that our English Merchants, who are always awake and solicitous for their own interests, have not yet found it out and set up a building place there?

(3) Whether iron-work and workmen are to be had there for carrying on such a service is much to be questioned. The first, as we conceive, is to be introduced; and what charge and difficulty may attend such an introduction we do not know, nor do we think it fit that their Majesties, upon so light a proposition, should venture upon it. And if the few workmen that are there are called to this service, those that now employ them must be frustrated and disabled to carry on their business, which will be no

very acceptable procedure.

(4) To talk of sending New England and East Country commodities thither is talking at random. There comes no cordage ready made from thence, or any sails or canvas or other stores manufactured, fitting for the service of shipping. That is all done here. Nor can it be imagined, if the stores that come from those places could be manufactured in Ireland, the merchants would ever be brought to send them thither on any tolerable terms, having no correspondence with the place; all traders respecting the ports they go to as they have factors, acquaintance, or probability of re-loading for other voyages, or the like. And this Board having always found it exceedingly difficult to obtain the delivery of foreign commodities at Portsmouth, and almost impossible to prevail for Plymouth, can have little hopes of having it done for Ireland.

(5) The charge of manning and gunning such ships as shall be built there is to be considered, which, as we conceive, will be both difficult and chargeable. Thus, your Honours may perceive there are other circumstances besides those of convenient rivers and woods for purposes of this nature, or we should propose the building of more ships in Bristol River, as also the setting up some in Milford Haven and other places on that coast, where timber, plank, iron-work and workmen are as plentiful and as cheap as in Ireland, and the works more easy to be inspected. But considering what extent the bulk of the Navy business is swelled to, how weak its supports are, and with what difficulty even those ships we daily visit are kept to the rules prescribed for them, we cannot advise the laying any more burthens on it of that kind (as being too many ways already overlaid) at least in the method proposed, under so many certain charges and uncertain supplies that will unavoidably happen to a place so little frequented, and where we have already had such experience of a fruitless purveyance.

Nevertheless, if these gentlemen, or any other, will undertake to contract, as was formerly proposed to his late Majesty, King Charles the Second, by Sir Edward Spragg and Sir Nicholas Armorer, to build any frigate in Ireland for their Majesties, and deliver them at Portsmouth or Plymouth, ready fitted for service at sea; and to perform the same in a reasonable time, it will, in our opinion, be a project worthy of encouragement. All which is humbly submitted to your Honours' better judgment by your Hons'

obedient Servants.

FRENCH MARINE ARTISTS

With reference to the late Mr A. G. H. Macpherson's article in M.M. April 1951 and my note on p. 320 of M.M. October 1951, in connexion with it, I have just had the very great pleasure of reading L'Art et La Mer, by Jean Marie and Léon Haffner, a sumptuous work recently published by Les Editions Ozanne, Paris.

The book provides a great deal more evidence in favour of my contention that Mr Macpherson was woefully unjust when he declared that 'the records are silent as to the existence of a single

contemporary French marine artist', that is from about 1793 to 1875.

Apart from Garneray, mentioned by Mr Macpherson himself, and the artists mentioned in my note, Marie and Haffner cite the names and some of the works of Rossel de Cercy (a naval captain), Théodore Gudin (another naval officer), Crépir, Gilbert, Eugène Isabey, and Morel-Fatio, who was curator of the French Maritime Museum. These men were specifically marine artists. Of the world-famous French artists of the period, some of whose works were marine pieces, there were Delacroix, an exhibition of whose works is being shown in London this year, Courbet, Corst and others. I should certainly not have forgotten in my note the Norman Gericault, a copy of whose 'Radeau de la Méduse', a shipwreck scene belonging to the same epoch, is to be

seen in pretty well every street and village all through France.

Mr Macpherson's lapse can, I imagine, be attributed to that compelling fear of the French Revolution which gripped the governing circles of Great Britain as soon as it began, and which they succeeded in transmitting to their children and their children's children, and with the help of Baroness Orczy, even to their great grandchildren. Now it is possible to take the view that the French Revolution was a disaster for France and mankind, and in recent lamentable French naval history that was the view represented by such men as Admirals Esteva and Decoux. Or it is possible to hold, with that minority of modern French naval opinion represented by Admiral Guépratte of Dardanelles fame and Admiral Muselier, organizer of the Free French Naval Forces, that the French Revolution was an expression of much that is best in the aspirations of the people of France and all the world.

What is not arguable is, on the one hand that the spirit of the French navy was destroyed by the Revolution (I happen to be writing on the First of June) or on the other that French art, and in

particular French marine art, suffered eclipse because of it.

As if to emphasize the persistence of the artistic spirit among the seamen of France in the Revolutionary period, there is in a church in La Rochelle a picture (it is reproduced in the May issue of Neptunia). This picture was placed there in 1799, like so many before it, as a thank-offering for delivery from a storm. There is, perhaps, as the author of the article in Neptunia on Rochellais marine votive offerings shows, a subtle difference in the outlook expressed in this picture compared with that of its predecessors. But there it is, a perfect example of anonymous, popular marineart, and proof that a maritime people will inevitably sooner or later create its own ineradicable tradition of marine art.

J. E. DE COURCY IRELAND

EARLY MENTION OF CRICKET

The following is extracted from an order book (now in the National Maritime Museum) kept by Captain Richard Norris, commanding the *Gibraltar*. It is a copy of a fleet order issued by Admiral John Norris, C.-in-C. of the fleet then lying in the Tagus, and reads as follows:

'From Admiral John Norris, Commander in Chief, to all captains of his Majesty's ships. Dated

on board the Pembroke at Lisbon, 12th July 1736.

Whereas, several quarrels have happened of late about Lisbon and Belem, between our People and the Portuguese, occasioned in a great measure, as it is thought, by letting the men go on shore to cricket and other diversions. Wherefore, for preventing the like as much as possible for the future, you are hereby directed and required to take special care that no man belonging to the ship under your command have leave to go on shore on his private occasions but whom you shall be well assured will not be guilty of any irregularity there.

Whether the 'several quarrels' arose from an attempt to teach the local inhabitants cricket or from the 'other' (possibly less innocent) 'diversions' is a matter for speculation, but does anybody know of an earlier reference to cricket?

QUERIES

27. Gabert. Particulars wanted of the Gabert, apparently a kind of sailing lighter used for the transport of coals and other goods from the Clyde ports to the West Highlands. Name said to be from the French gabare. The sailing smacks used for Arran gravel, etc., down to about fifty years ago seem to have taken the place of the gaberts, and they in turn have been superseded by the steam lighters called puffers. A cutter rigged sailing smack was used to carry household furniture from Loch Ranza to Hunter's Quay in 1897.

28. 'RIGGED ACCORDING TO LAW.' In the Naval Chronicle, Vol. VIII, 1802, under 'Monthly

Register of Naval Events,' the following appears:

A cause of considerable importance to the owners of smacks, &c. was lately tried in the Court of Exchequer, which originated in Captain Stiles of the *Roebuck*, revenue cutter of Portsmouth, having, in the month of December last, seized a vessel called the *Blossom*, Edward Stuart, Master, for not being rigged accordingly to law, viz. 'not having a fixed stay.'

After a complete investigation of the circumstances, and Captain Stile's evidence was given, in which he clearly pointed out the method in which the said vessel was rigged, the Court condemned the seizure as a good and lawful prize.

What was this law, and why? Would it apply to a Thames sailing barge, for instance?

C. H. WILLIAMS

29. PELICAN OF FALMOUTH. I have in my possession a commission or Letter of Marque and Reprisal issued in 1801 to the ship Pelican in the name of Uriah Gage, Captain, of Falmouth; also named in the commission are James Page, mariner and Benjamin Osler, merchant, of Falmouth. I would like to be put in touch with someone who could give me the details of this ship and her subsequent history. The Commission is signed Arden, Registrar, London, 4 March 1801....

HARRY WEBSTER

30. Skeletons at Sheerness. While digging foundations for a greenhouse near Sheerness fortifications workmen recently found three skeletons 4 ft. beneath the ground, 20 yards north of Sheerness High Street and 20 yards east of the moat. On the centre skeleton were found three guineas of George III, dates 1777, 1783 and 1785 'in the region of the lower ribs, as though they had been placed in a waistcoat pocket'. The ground does not appear to have been consecrated and many theories have been current concerning this unusual burial. Most of these connect the interment with the dockyard and it has been suggested that the bodies are those of convicts who died during the construction of the dockyard church, of negro servants of naval officers, of executed mutineers, or of prisoners of war. There is a certain amount of evidence that Sheppey churchyards could not cope with the early nineteenth-century cholera outbreaks, but the evidence of the coins strongly suggests a date not much later than 1790. Perhaps some reader familiar with Admiralty Records or the history of Sheerness dockyard knows of some document that will enable this dockyard mystery to be finally resolved.

R.H.D.

ANSWERS

19. (1947.) DRY-LAND SHIPS. When the Great National Exhibition was held in Rome in 1911, a huge house-boat was erected, shaped as one of the imaginary Nemi ships. Although on the water, she did not actually float, for her concrete hull rested firmly on the bottom of a basin. Contemporary photographs showed her as a fantastic two-deck Roman galley, her poop topped by a templum, complete with statues and tripods, though more prosaically housing a restaurant. This monstrosity was done away with by the end of that year, when the Exhibition was closed down.

Another dry-land ship was built in Naples for the 1940 Exhibition and was a much more sensible construction, being a faithful reproduction of a seventeenth-century Venetian galley. Up to the water-line she had a concrete hull, which rested on the bottom of an artificial pond, but gave the impression that she was actually floating, while her upper works were made of wood with gilded plaster decorations. She was lateen rigged, had a deck fitted with benches and her port side showed 24 oars, the starboard side being moored to a dock, and carried seven original bronze guns, which had been lent by the Museo Storico Navale of Venice. On the whole she was a very pleasing sight, but had a brief life and was broken up soon after the war had started.

A far more interesting example is given by the light cruiser Puglia, formerly of the Italian Royal Navy, which to-day stands on the side of a hill overlooking the Lake of Garda (Northern Italy). This moderate-sized cruiser of 2538 tons was built in Taranto in 1898 and saw much service in foreign waters, often visiting the Far East station. Soon after the Old War (1914-18) she was assigned to the Dalmatian coast and during the Armistice period got involved with D'Annunzio's adventurous expedition to Fiume (1919). One day, while on patrol duty ashore, her commander Captain Gulli was killed in a clash with Jugoslav partisans, an event which greatly grieved D'Annunzio and later caused him to ask the Government to have the ship's prow erected as a memorial in his garden, where he had settled down when the Fiume affair had been brought to a satisfactory conclusion. The request was granted, as in the meantime the Admiralty had decided to have the old ship broken up. Her steel plates were thus brought on to the shores of the lake and the entire fore section, starting from the water-line, was rebuilt on a stone base, with deck fittings, wheel-house, guns and all. As she stands to-day, one may well call her a composite construction, since from midships aft the cruiser is set in stone, with decks finished off in lightcoloured marble with inlaid black strakes. The memorial was completed in 1938 with the rather unhappy addition of a huge bronze figurehead, but by now trees and shrubs have grown all around, and on fine days lizards crawl aboard and bask on her warm decks.

G. B. RUBIN DE CERVIN

This is a word-for-word extract from The Illustrated London News, p. 118, 19 August 1843:

Royal Naval School

The 'Model Frigate' represented in the engraving has just been added to the educational means and appliances of the upper school, we believe at the suggestion of the Hon. Capt. Rows, M.P.; and for practice in what may be termed nautical gymnastics i.e. learning seamanship practically, we think the model-frigate must prove as serviceable as the idea is ingenious and striking. She was built at Chatham in the early part of the year and is about the size of a sloop of war.

Her top sides are laid on sleepers, and after her construction she was taken to pieces and removed to the school ground at Greenwich, where she has been set up as if in her proper element; she has ten ports of a side, with bridle ports, eight long guns of a side, and a figure-head; and she may be set sail for teaching rigging and unrigging, gunnery etc. In the engraving she is shown going into action under her three top sails, with hands aloft loosening top gallant sails.

It is supposed that she will be appropriately christened 'the Princess-Royal'.

Contemporary large-scale maps of Greenwich show the outline of the 'Model Frigate', namely H.M.S. Fame, in position in the school-ground in front of the Queen's House.

W. ADAM WOODWARD

15. (1951.) PADDLE SLOOPS. H.M.S. Sphinx was at Suakin 1884-5, Tamai 1884 and Burma 1885-6. My records give her as having been sold in India in 1919.

26. (1951.) 'NIP AND TUCK.' Sir Frederick Whyte is quite correct in his statement concerning the meaning of this American expression. Dr Mitford M. Mathews, in his Dictionary of Americanisms on Historical Principles, lists many sources in the United States where the ex-

pression occurs. For the benefit of interested readers this list follows:

'Nip and Tuck. Also Nip and Chuck, tack. A close approximation to equality in racing or other competition, neck and neck.' 1832, Paulding, Westward Ho!, Vol. 1, p. 172: 'There we were a nip and tuck up one tree and down another.' 1836, Quarter Race Kentucky, p. 16: 'It will be like the old bitch and the rabbit, nip and tack every jump.' 1846, Quarter Race Kentucky, p. 123: 'Then we'd have it again, nip and chuck.' 1869, Putnam's Magazine, January (De Vere): 'It was nip and tuck all along, who was to win her.' 1890, Shields, Big Game in North America, p. 92: 'It was a nip and tuck race.' 1949, Oregonian (Portland, Oregon) 10 August: 'The game was nip and tuck all the way.'

Also as verb, rare. 1897, Wilkins Jerome, p. 239, 'By nippin' an' tuckin' an' pinchin'.'

EDGAR K. THOMPSON

10. Galway Hooker. The lines of a Hooker, and of a smaller work boat the Pookhaun, are given in *A Manual of Yacht and Boat Sailing*, by Dixon Kemp, 8th ed. 1895. There is another west of Ireland type, the Blothogue or some such name, but I have no particulars. These boats should be well known at Galway.

J. A. STEWART

I wrote an article about these craft in the Yachting Monthly for July 1919. F. GILLILAND

Mr Diarmuid Murtagh sends similar information. (Ed. M.M.)

11. Compass card. The word 'fly' or 'flye' was used in the sixteenth century to describe what is now termed the compass card. It is found in all English books on navigation from Richard Eden's translation of 1561 of Cortes's Arte de Navegar of 1545, The Art of Navigation. This was the earliest English navigation manual. The word fly continued in use in this sense throughout the seventeenth century. However, in the first third of the seventeenth century the word 'card' began to be used, as well as 'fly' to describe the compass card. The earliest navigational book in which I have found it is Richard Norwood's Trigonometrie... Whereunto is annexed (chiefly for the use of Seamen). A Treatise of the application Thereof in the three principall kindes of sailing... of 1631. He also used 'card' in the sense of 'fly' in the first edition, 1637, of his The Seamans Practice.

In the sixteenth century, the word 'card' always meant 'chart'. On the other hand, the word 'compass' was often and rather confusingly used in the sense of chart. For instance, the 'pardoxall

compass' referred to by Dee, Davis, Wright and Polter was a circumpolar chart. .

W.E.M.'s quotation from W. Folkingham's, Art of Survey, 1610, which says 'The Flie is a Card Divided into eight, sixteene, thirty two equal parts', by laying emphasis on the word 'Card', taken in conjunction with Norwood's use of the word seems to indicate that the word 'card' began to be associated in seamen's minds with the compass card between 1610 and 1631.

D. W. WATERS

14. Particulars of H.M.s. VIXEN. The vessel to which Mr Heslop refers is almost certainly the first class wooden paddle sloop Vixen, 6 guns. Laid down at Pembroke during the first half of 1840, and launched 4 February 1842. Designed by Symonds, of 1054 tons B.M. Approx. dimensions: 180 ft. on gun-deck, 36 ft. extreme beam inside paddle-boxes, 21 ft. depth of hold. After launching she was towed to Woolwich to be fitted with engines of 280 N.H.P., manufactured by Seaward and Capel. These were of the direct acting type with two cylinders, each 63 in. dia., and with a stroke of 63 in. Her paddle wheels were 26 ft. 6 in. dia., and at 18 r.p.m. gave her a

speed of 9.5 knots. Her armament comprised, two 10 in., 85 cwt. pivot guns, four 32-pdr, 42 cwt. guns mounted on the beam, and boat guns. Her complement was 140/150 officers and men. She was commissioned at Chatham 30 August 1841, Commander Henry Boyes, for the East Indies Station, and took part in the First China War, being in the squadron forming the Yangtze-kiang Expedition, July-September 1842. Boyes was posted 23 December 1842 and Commander George Giffard appointed to her 5 January 1843.

In August 1845 she took part in operations against pirates off the mouth of the Brunei and at Maludu Bay, as temporary flagship of Rear-Admiral Sir Thomas Cochrane. Giffard was posted 26 December 1845. She returned home mid-1846 and was placed in ordinary at Woolwich.

Commissioned 26 August 1847, Commander A. P. Ryder, for the North American and West Indies Station. In February 1848 with the *Alarm*, 26, was sent to Nicaragua to protect British interests during one of the periodic upheavals, a Colonel Salas of the Nicaraguan Army having imprisoned two British subjects in a fort at Serapaqui. Negotiations proving futile, a passage up river was forced and the fort stormed 12 February 1848. For this action Ryder was posted 2 May 1848 and Commander Robert Jenner appointed to her 10 May 1848. Returned home mid-1850 and placed in ordinary at Portsmouth.

Commissioned 22 March 1852, Commander F. L. Barnard, for service off the south-east coast of America, she remained there till her return in 1855, when she was repaired at Woolwich. Commissioned 3 February 1857, Commander G. F. Mecham, for the Pacific Station, she stayed

there till circa 1861, and was scraped soon after her return.

I would like confirmation of her end, as I suspect she was sold either in Australia or China.

T. ELSTON WING

Three other members send answers, all giving the date of launch as 4 February 1841. R.C.A. and T.D.M. give her beam as 20 ft. 11½ in. W.P.T. gives her armament as one 10 in., one 110-pdr and four 32-pdrs. He says she was sold in 1862. Otherwise, all four members are in agreement. (Ed. M.M.)

16. PORT AND STARBOARD LIGHTS. The contemporary numbers of the *Nautical Magazine* give the following information. In 1847 the Admiralty issued instructions that the steam packets should carry a white masthead light and green and red bow lights (originally a white bow light had been tried). In the next year the order was extended to all Admiralty steamers and their example was followed by the P. and O. and five other leading shipping companies. In 1849 these lights were adopted by France and Sweden, and in 1850 the Mercantile Marine Act empowered the Admiralty to issue instructions to all British steamers.

For the history of this subject see *The Mariner's Mirror*, 1913, pp. 257–64, an article by Mr William Senior. The gist of it is that steamers were required to show side and masthead lights from 1847 or 1848 and that similar regulations were applied to sailing ships in 1853. One gathers that this country showed the way.

R.C.A.

As far as I know the first Act in England on the carrying at night of white top lights on steamships was dated January 1847, with the restriction: 'only inner half of 20 miles from the coast, men-of-war excepted and ships not registered in England'. The first Act in England on carrying coloured side or board lights was dated May 1852. In the Netherlands, regulations on the carrying of top lights on steam vessels were for the first time issued 4 September 1824. See, for example, the edition of the Linschoten-Vereeniging on the Curação (1827), Vol. 1, pp. 21 and 163.

Official instructions for preventing collisions were for the first time considered in 1847 and developed in accordance with those on carrying lights. International regulations on this matter did not exist before about 1885.

Naval Wars in the Levant, 1559-1853. By R. C. Anderson. University of Liverpool Press, 1952. Price 30s.

If Dr Anderson's book can be said to fill a gap, the stress is as much perhaps upon the filling as upon the void. He gives us nearly six hundred pages of text, a long bibliography and ample indices. Yet the book is quite the opposite of prolix. If Kallimachos be expiating his malice by a study of Levantine naval history, and such a penance were in the best Greek tradition, he would surely concede that $\tau \delta$ $\mu \epsilon \gamma a \beta \iota \beta \lambda lov \iota \zeta ov \tau \tilde{\omega}$ $\mu \epsilon \gamma a \lambda \tilde{\omega}$ $\kappa a \kappa \tilde{\omega}$ is not a truth capable of universal application. To attempt to write a naval history of any one thalassocracy over a period of three centuries is a major feat, and the wonder is that Dr Anderson has covered so wide a field in so short a compass. His book is a naval history of two great Mediterranean sea-powers, Venice and Turkey, but England, France, Spain and Russia play scarcely less important roles, and place has also to be found for the squadrons of Malta, Naples and Sardinia. Occasionally, too, the stage is held by ships of Austria, the Netherlands and the United States, while the story ends with the renaissance of the Greek Navy under Kanaris and Miaoulis.

It must also be remembered that fighting of a sort was continuous to an extent almost without parallel outside the Mediterranean, and that is was so protracted very largely because it was so diffuse and indecisive. For the historian who presumes to weed out the trifling, there is remarkably little to record, and to dwell on the highlights is simply to mislead. The story that Dr Anderson has to tell is extremely sordid and often very tedious, which is partly why it has not been told before, and the author is to be congratulated on having resisted all temptations to make it otherwise. The tragedy of the last five hundred years of European history will not be appreciated, nor its lessons

learnt, until all historians are as honest with themselves and with their readers.

The fact that the story is sordid and dull in parts does not mean that it was not worth telling, and it is told objectively and with admirable restraint. The squabbles of the Christian powers afford ample opportunities for Kingsleyesque jibes, but Dr Anderson is too fine a scholar to make that sort of capital. To say that he writes from an English standpoint is not to accuse him of partisanship. There is no more mischievous brand of history than that which purports to be unbiased, and Dr Anderson's approach reflects that of the English officer of those days called upon to tackle the situations which are here described with scrupulous honesty. The general historian is thus prepared for a certain lack of comprehension of the tortuous diplomacy and internal polities of the Mediterranean powers, and will turn to Venetian and Turkish scholars to explain motives and ambitions. The value of Dr Anderson's book is that it tells us what happened as a seaman saw it. Often it is perfectly obvious that he is aware of much more than he records, but he interprets with welcome strictness the function of the naval historian. It is because so many of his predecessors have failed to observe a like discretion that our universities are prone to prefer dissertations on the fate of a handful of peasants at the Dissolution of the Monasteries to original research into neglected thalassocracies of the past. My personal opinion is that there is a word or two in favour of Venice that Dr Anderson has left unsaid, but the omission is doubtless to be explained, like the absence of reference to Sir Kenelm Digby's exploits at Scanderoon, by the need for compression. Few historians can have packed so many facts into six hundred pages, and to skip even a paragraph is quite literally to lose the whole thread of the narrative.

The research that has gone into the book can only be described as prodigious. As an example of full but never superfluous treatment of an unfamiliar subject, we may take the account of Austrian operations against Venice in 1848–9. Here is naval history at its best, and naval history so well written that the reader will surely hunger to fill in the political and social background for himself. I who must confess to having recoiled from the chauvinism of the Museo Correr, now intend to revisit it at the earliest opportunity. The names of more than five hundred officers appear in

the index, the great majority of them non-English, and in each case inclusion is dependent on their having made a positive contribution to the narrative. The tour de force, however, is the index of ships which contains approaching 1500 entries. It should at last be possible to attempt the identification of a little group of marine subjects of the Luny school depicting single ship actions with Turks and Egyptians, and one feels that Dr Anderson's book will be nowhere more welcome than in the Print Room at the National Maritime Museum.

The deliberate baldness of Dr Anderson's narrative may occasionally tantalize, the more so when the reader has a glimpse of the research that has gone into its making, but it is doubly welcome in an age where history boards seem to favour the fullest possible treatment of the narrowess subject. The book might properly supply the materials for four doctoral theses, but there are many historians who would have made a paper out of one of the footnotes and a dissertation out of a few paragraphs. In view of this compression, it was perhaps inevitable that Dr Anderson should rather have presumed upon his reader's knowledge. He does concede to tell us that a trabaccole is an Adriatic coasting craft, without, however, specifying her rig or tonnage; but how many readers of the M.M. are quite happy about the distinction between a polacre and a shebek? Ar introductory chapter on Mediterranean naval architecture from the pen of so distinguished an authority would have been a joy indeed, or is the author perhaps hatching a companion volume devoted to the last days of sail in the Mediterranean? A corpus of models of Mediterranear warships would fill a crying need, and no one is better qualified than Dr Anderson to undertake it

The book is handsomely produced, and the standard of proof-reading worthy of its contents There are one or two little slips, for example, on the plan of Acre on p. 563 the Princess Charlotte appears as Q. Charlotte; and I would have liked each page of the indices to be headed 'Index to Names of Ships' and 'Index to Naval Officers' instead of the first page only. Perhaps, too, there is room for an index of actions. A more serious complaint concerns the illustrations. What there are are excellent, especially those from pictures in the author's own possession, but ten plates is a paltry allowance for a work of this calibre. The number could surely have been doubled or even trebled, and a hint given of the riches in the Museo Storico Navale. We all know that plates are expensive in these days, but few would grudge a few shillings on the price of a book that is so ridiculously cheap at thirty shillings. Incidentally, it is curious that in a book by Dr Anderson not one of the ten plates should depict a ship-model. The bibliography is full, but one wishes it had been a little fuller. In these days when published dissertations are crammed with references to works that the author certainly has not digested even if he has always read them, Dr Anderson is certainly erring on the right side, but in his case one would have welcomed references to a periodical literature of which he is obviously a master. These, however, are small points of criticism, and ungrateful into the bargain.

One is often tempted to say of a book that it will not be superseded for many a year, but that is a two-edged compliment. A fine piece of work stimulates further research not stifles it, and to me it seems obvious that our new President's study marks the commencement of a new phase in Mediterranean naval studies. It is unlikely, however, that any new monograph of comparable scope will ever succeed in rivalling it for balance and compression, and for many years Naval Wars in the Levant will be the first authority to be consulted in any question concerning operations east of Malta.

THE RISE OF THE PORT OF LIVERPOOL. By C. NORTHCOTE PARKINSON. University of Liverpool Press, 1952. Price 255.

We could do with more books of this sort about the other great ports of Britain. By sticking closely to his subject (the port, not the city, of Liverpool), Dr Parkinson has taken the opportunity of throwing an important light on the growth of trade with Ireland, Africa and America. His papers are enriched by quotations from such sources as the Port Books, and they are full of facts and figures of great interest to the maritime historian. He takes the story up to 1793, a convenient date on the eve of the French wars, the Irish influx and the abolition of the Slave Trade which

ransformed the character of the town and its trade. Though it was a borough as early as 1207 Liverpool was essentially a port and only a port up to the beginning of the last century. An inflattering picture of the place in 1795 is quoted: 'the only pursuit of its inhabitants is commerce....It is the only town in England of any pre-eminency that has not one single erection or endowment for the advancement of science, the cultivation of the arts, or promotion of useful knowledge.' By that date it was the second port in the kingdom, handling one-sixth of the total clearances from British ports, whereas in 1715 it stood seventh in a list which makes Bristol the fifth, Chester the ninth and Southampton the thirteenth port in the kingdom. The single-minded devotion of its inhabitants to commerce proved successful largely on account of the geographical disabilities suffered by its rivals. The first edition of the 'Mariner's Mirror' marks Chester but not Liverpool. With the silting up of the Dee, Chester lost the Irish trade to Liverpool. A hundred years later Liverpool had outstripped even Bristol in capturing most of the African Slave Trade, partly by undercutting its rival and partly because of the increase in exports from Manchester. It is well for the inhabitants of Liverpool to realize that the prosperity of their city depended on the textiles of Manchester and the slaves of the Guinea coast. Furthermore, as Dr Parkinson points out, the security afforded by the Northern Channel in times of war with France attracted an increasing amount of the American and West Indies trade, while the prevailing winds prevented the use of the port by sailing men-or-war: they 'fixed the character of the Mersey as a port for trade, and for trade alone'. C.C.L.

MEN OF THE WOODEN WALLS. By Frank C. Bowen. Staples Press. Price 215. net.

This book is made up of nearly seventy miniature biographies of men concerned with wooden ships, notably armed vessels. Of this number the preponderance are British, but there are six Americans, four Frenchmen, two Dutchmen, two Italians, a Swede: and Peter the Great to add a touch of the bizarre.

Each subject is illustrated by the reproduction of a print, nearly always drawn from the collection at the National Maritime Museum. This, though no doubt convenient from a bookmaking point of view, is often a pity. For these prints, whatever the particular process, were rarely made direct from the living model, and in the majority of cases original portraits, often excellent, exist in the public galleries. Good reproductions of these would have reinforced the author's vivid little accounts, and for a book of this kind (text and illustrations closely matched, and both drawn from primary sources) there would be room indeed. Too often the print actually included is little more than a decoration, though there are exceptions, such as the fine etching of Tromp by Jan de Frey which is always a pleasure to consider.

While it was laudable to include men of such stature as Tromp, de Ruyter, Duguay Trouin, Suffren and Paul Jones, there are notable absentees from the eminent of this country. Among them are Monck, Shovell, Kempenfelt, Cornwallis, Barham and Codrington, all of whom may be said to have contributed much more to the history of wooden fleets than some of those, such as James Watt, Robert Napier and John Ericsson, who are among the subjects chosen. Among the best

accounts are those of Blake, Howe, Samuel Hood and Nelson.

No selection, and no process of illustration will command unanimous approval, and there is no doubt that, as a conspectus of notable men in earlier seafaring, this book has interest and attraction. It does not indeed add to the sum of scholarship, but it does provide a series of digests intelligently written and reasonably indexed.

OLIVER WARNER

Devon Harbours. By Vernon C. Boyle and Donald Payne. Christopher Johnson. Price 155.

This volume is one of a series; Cornish Harbours has already been published and if it is as good as this one on the harbours of Devon, it should be well worth reading. The present book is divided up into two parts; Mr Vernon Boyle, who is a member of our Society, writes about the North Devon coast while the South Devon harbours are described by Mr Donald Payne; the photographs illustrating the book are also by Mr Payne; the line drawings are by Mr Boyle; both in their own way are excellent. Mr Boyle's sketch of Beer luggers and his Torridge polackers coming over the bar at Appledore are particularly good. There are a couple of slight mistakes, though, in the letterpress under the Beer drawing, the registration letter 'E' surely stands for Exeter, not Exmouth; when the Beer luggers were fitted with motors the hulls were shortened, the old longer boat would have become distorted with the weight of the engine in her when being pulled up and down the steep shingle beach; it is stated that the introduction of the motor made no difference to the hull.

Mr Payne has obviously taken a lot of trouble to get his facts and the details of the places about which he is writting correct but the result is somewhat like a guide book, interesting though a lot of it is. On the other hand, Mr Vernon Boyle writes like the native Devon-born man he is, as is he knew and loved every stick and stone of the place that he is describing and for this reason, though he may give a few facts and figures, they do not seem to obtrude but fit into his narrative quite naturally. As, by looking at his drawings, one can visualize so easily the great fawhite clouds sweeping over Bideford Bay and up by the Torridge estuary, so one can hear the pleasant Devon burr in the speech of his characters when reading some story of his fellow county men. One could do with a good deal more on similar lines, it is a pity the harbours of the North

coast are so few.

The book is nicely got up and the illustrations and printing are clear and well done with a good index to top up.

Model Sailing Yachts. By W. J. Daniels and H. B. Tucker. Percival Marshall and Co. Ltd. Price 10s. 6d.

This work contains the instructions for building and sailing modern 'class' model yachts. Full plans, tables of off-sets, sail measurements, methods of rigging, and descriptions of steering gears are accurately and clearly explained. Three designs are included, a 36 in. restricted class, an M class and a 10-rater. Both authors are the recognized experts in this branch of yacht modelling, and both are Vice-Presidents of the Model Yachting Association. Anyone desiring to follow this interesting and absorbing hobby will find no better work on the subject.

PUBLICATIONS RECEIVED

THE DHOW SAILOR. By Dr R. LEBARON BOWEN. Reprinted from The American Neptune, July 1951. Illustrated.

MARINE INDUSTRIES OF EASTERN ARABIA. By Dr R. LEBARON BOWEN. Reprinted from The Geographical Review, July 1951. Illustrated.

THE COMPLEAT MODELLIST. January 1952.

J. LAURITZEN LINES: News. Copenhagen. August 1952.

Vol. 10 onwards at 10s. 6d. each (postage 5d.). The index will be supplied free to purchasers of a complete volume or sold separately for 2s. each.

Details of back numbers available will be supplied on request. (Published by the Cambridge University Press, 200 Euston Road, London, N.W. 1.)

The following other publications of the Society are at present available for sale:

Occasional Publications: No. 5, Lists of Men-of-War, 1650-1700. Part I. English Ships. Compiled by R. C. Anderson. Part II. French Ships. Compiled by Pierre Le Conte. Part III. Swedish Ships. Compiled by Hj. Borjeson. Danish-Norwegian Ships. Compiled by P. Holck. German Ships. Compiled by W. Vogel and H. Szymanski. Part IV. Ships of the United Netherlands. Compiled by A. Verugdenhil. Part V. Indexes. Each Part 2s. 6d. (Postage 2d.)

REPRINTS: The Rye River Barges, by Leopold A. Vidler.

East Cornish Luggers, by H. O. Hill.

The Fishing Luggers of Hastings, Parts I and II (separately), by James Hornell. The World's First Clipper, by Boyd Cable.

Composite Tea Clipper Cutty Sark, by Commander G. C. Steele, V.C., R.N.

The Monuments in the Church of St Nicholas, Deptford, by John Summerson.

The North Ferriby Boats, by E. V. Wright and C. W. Wright.

The Battle of Trafalgar, by Rear-Admiral A. H. Taylor. Price 7s. 6d.

MARITIME MISCELLANY SERIES, No. 1, The Van de Veldes, by W. Voorbeytel Cannenburg.

No. 2, Piracy, by Philip Gosse. Price 25.

No. 3, The Anchor, by J. W. van Nouhuys.

No. 4, Old Maritime Prints, by A. G. H. Macpherson.

No. 5, The Timber Problem of the Royal Navy, 1652-1862, by Robert G. Albion. Price 2s.

No. 6, The Fighting Ship from 1860 to 1890, by Admiral G. A. Ballard.

No. 7, The King's Flags, by Cecil King.

(Each, price 2s. 6d. except where otherwise stated.)

PLANS: Model-maker's Plans of the Victory, 10 plans on 3 sheets from those used in the restoration of 1923-35. (Price 215.)

Enquiries for any of these should be addressed to The Hon. Secretary, Society for Nautical Research, National Maritime Museum, Greenwich, S.E. 10.

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